

Figure 1

ATOM	1	CB	GLU	1	55.967	11.986	66.300	1.00	59.11	AAAA	C
ATOM	2	CG	GLU	1	56.138	11.012	65.162	1.00	79.17	AAAA	C
ATOM	3	CD	GLU	1	57.382	11.319	64.321	1.00	85.10	AAAA	C
ATOM	4	OE1	GLU	1	58.404	10.754	64.795	1.00	86.18	AAAA	O
ATOM	5	OE2	GLU	1	57.424	12.013	63.270	1.00	79.70	AAAA	O
ATOM	6	C	GLU	1	53.508	12.557	65.350	1.00	48.46	AAAA	C
ATOM	7	O	GLU	1	52.685	11.863	65.781	1.00	51.27	AAAA	O
ATOM	10	H	GLU	1	54.256	10.338	67.159	1.00	61.64	AAAA	H
ATOM	12	CA	GLU	1	54.602	11.778	67.081	1.00	54.77	AAAA	C
ATOM	13	H	ILE	2	53.608	13.860	66.375	1.00	37.66	AAAA	H
ATOM	15	CA	ILE	2	52.769	14.699	65.604	1.00	40.87	AAAA	C
ATOM	16	CB	ILE	2	52.925	16.122	66.160	1.00	41.97	AAAA	C
ATOM	17	CG2	ILE	2	52.036	17.122	65.484	1.00	38.50	AAAA	C
ATOM	18	CG1	ILE	2	52.560	16.006	67.663	1.00	46.58	AAAA	C
ATOM	19	CD1	ILE	2	53.150	17.176	68.498	1.00	32.29	AAAA	C
ATOM	20	C	ILE	2	53.122	14.711	64.139	1.00	46.47	AAAA	C
ATOM	21	O	ILE	2	54.258	15.029	63.852	1.00	51.65	AAAA	O
ATOM	22	H	CYS	3	52.235	14.409	63.196	1.00	49.61	AAAA	H
ATOM	24	CA	CYS	3	52.435	14.677	61.773	1.00	38.93	AAAA	C
ATOM	25	C	CYS	3	51.429	15.708	61.302	1.00	42.06	AAAA	C
ATOM	26	O	CYS	3	50.290	15.521	61.690	1.00	42.37	AAAA	O
ATOM	27	CB	CYS	3	52.159	13.415	60.999	1.00	35.66	AAAA	C
ATOM	28	SG	CYS	3	53.019	12.004	61.674	1.00	36.98	AAAA	S
ATOM	29	H	GLY	4	51.851	16.709	60.580	1.00	42.39	AAAA	H
ATOM	31	CA	GLY	4	50.973	17.718	60.003	1.00	47.71	AAAA	C
ATOM	32	C	GLY	4	51.703	18.407	58.869	1.00	48.23	AAAA	C
ATOM	33	O	GLY	4	52.916	18.345	58.884	1.00	55.36	AAAA	O
ATOM	34	H	PRO	5	51.056	19.212	58.048	1.00	49.63	AAAA	H
ATOM	35	CD	PRO	5	51.637	19.947	56.860	1.00	45.28	AAAA	C
ATOM	36	CA	PRO	5	49.605	19.341	58.083	1.00	41.57	AAAA	C
ATOM	37	CB	PRO	5	49.397	20.703	57.474	1.00	44.30	AAAA	C
ATOM	38	CG	PRO	5	50.632	21.036	56.683	1.00	46.43	AAAA	C
ATOM	39	C	PRO	5	48.932	18.217	57.354	1.00	36.40	AAAA	C
ATOM	40	O	PRO	5	49.403	17.094	57.396	1.00	43.35	AAAA	O
ATOM	41	H	GLY	6	47.787	18.438	56.795	1.00	39.15	AAAA	H
ATOM	43	CA	GLY	6	46.896	17.336	56.350	1.00	39.24	AAAA	C
ATOM	44	C	GLY	6	47.710	16.365	55.529	1.00	33.68	AAAA	C
ATOM	45	O	GLY	6	48.510	16.863	54.753	1.00	36.00	AAAA	O
ATOM	46	H	ILE	7	47.586	15.111	55.788	1.00	35.70	AAAA	H
ATOM	48	CA	ILE	7	48.307	14.053	55.141	1.00	37.65	AAAA	C
ATOM	49	CB	ILE	7	48.556	12.797	55.933	1.00	36.31	AAAA	C
ATOM	50	CG2	ILE	7	49.043	11.700	54.988	1.00	34.67	AAAA	C
ATOM	51	CG1	ILE	7	49.561	12.857	57.067	1.00	39.34	AAAA	C
ATOM	52	CD1	ILE	7	49.678	14.249	57.668	1.00	40.22	AAAA	C
ATOM	53	C	ILE	7	47.338	13.762	53.977	1.00	45.00	AAAA	C
ATOM	54	O	ILE	7	46.150	13.843	54.195	1.00	51.52	AAAA	O
ATOM	55	H	ASP	8	47.767	13.631	52.751	1.00	45.60	AAAA	H
ATOM	57	CA	ASP	8	46.928	13.283	51.631	1.00	44.05	AAAA	C
ATOM	58	CB	ASP	8	47.003	14.469	50.651	1.00	44.21	AAAA	C
ATOM	59	CG	ASP	8	45.909	14.379	49.600	1.00	43.48	AAAA	C
ATOM	60	OD1	ASP	8	45.660	13.262	49.096	1.00	51.77	AAAA	O
ATOM	61	OD2	ASP	8	45.253	15.374	49.251	1.00	46.84	AAAA	O
ATOM	62	C	ASP	8	47.428	12.000	50.992	1.00	42.16	AAAA	C
ATOM	63	O	ASP	8	48.423	12.143	50.330	1.00	48.50	AAAA	O
ATOM	64	H	ILE	9	47.096	10.817	51.321	1.00	42.76	AAAA	H
ATOM	66	CA	ILE	9	47.441	9.505	50.939	1.00	44.05	AAAA	C
ATOM	67	CB	ILE	9	47.212	8.483	52.077	1.00	40.82	AAAA	C
ATOM	68	CG2	ILE	9	47.669	7.085	51.653	1.00	36.35	AAAA	C
ATOM	69	CG1	ILE	9	47.888	8.917	53.364	1.00	41.17	AAAA	C
ATOM	70	CD1	ILE	9	49.376	8.947	53.286	1.00	43.78	AAAA	C
ATOM	71	C	ILE	9	46.530	9.137	49.794	1.00	51.48	AAAA	C
ATOM	72	O	ILE	9	45.338	9.420	49.832	1.00	63.05	AAAA	O
ATOM	73	H	ARG	10	47.004	8.417	48.812	1.00	54.87	AAAA	H
ATOM	75	CA	ARG	10	46.283	8.089	47.600	1.00	54.17	AAAA	C
ATOM	76	CB	ARG	10	45.703	9.358	47.023	1.00	48.54	AAAA	C
ATOM	77	CG	ARG	10	46.361	10.169	45.952	1.00	46.55	AAAA	C
ATOM	78	CD	ARG	10	46.002	11.635	46.264	1.00	52.63	AAAA	C
ATOM	79	HE	ARG	10	45.082	12.226	45.284	1.00	59.27	AAAA	H
ATOM	81	CZ	ARG	10	44.269	13.262	45.498	1.00	56.22	AAAA	C
ATOM	82	HH1	ARG	10	44.153	13.891	46.666	1.00	55.14	AAAA	H
ATOM	85	HH2	ARG	10	43.455	13.803	44.602	1.00	52.29	AAAA	H
ATOM	88	C	ARG	10	47.019	7.373	46.492	1.00	57.23	AAAA	C
ATOM	89	O	ARG	10	48.240	7.288	46.281	1.00	56.32	AAAA	O
ATOM	90	H	ASN	11	46.248	6.654	45.629	1.00	57.23	AAAA	H
ATOM	92	CA	ASN	11	46.800	5.917	44.494	1.00	50.73	AAAA	C
ATOM	93	CB	ASN	11	47.704	6.798	43.671	1.00	44.65	AAAA	C
ATOM	94	CG	ASN	11	46.878	7.732	42.829	1.00	50.72	AAAA	C
ATOM	95	OD1	ASN	11	45.749	7.451	42.403	1.00	72.59	AAAA	O
ATOM	96	HD2	ASN	11	47.499	8.869	42.587	1.00	54.38	AAAA	H
ATOM	99	C	ASN	11	47.635	4.736	44.915	1.00	53.07	AAAA	C
ATOM	100	O	ASN	11	47.303	3.701	44.347	1.00	51.95	AAAA	O
ATOM	101	H	ASP	12	48.566	4.822	45.878	1.00	50.96	AAAA	H
ATOM	103	CA	ASP	12	49.204	3.570	46.263	1.00	55.44	AAAA	C

0055275-0030001

09/555275

2/58

ATOH	104	CB	ASP	12	50.659	3.568	45.759	1.00	66.47	AAAA	C
ATOH	105	CG	ASP	12	50.879	4.026	44.314	1.00	68.25	AAAA	C
ATOH	106	OD1	ASP	12	50.441	3.185	43.457	1.00	58.31	AAAA	O
ATOH	107	OD2	ASP	12	51.391	5.120	43.989	1.00	70.56	AAAA	O
ATOH	108	C	ASP	12	49.061	3.322	47.758	1.00	59.23	AAAA	C
ATOH	109	O	ASP	12	49.697	3.849	48.711	1.00	59.65	AAAA	O
ATOH	110	H	TYR	13	48.411	2.187	48.036	1.00	59.64	AAAA	H
ATOH	112	CA	TYR	13	48.328	1.672	49.397	1.00	64.06	AAAA	C
ATOH	113	CB	TYR	13	47.968	0.196	49.409	1.00	64.56	AAAA	C
ATOH	114	CG	TYR	13	47.467	-0.357	50.721	1.00	69.18	AAAA	C
ATOH	115	CD1	TYR	13	46.216	-0.024	51.248	1.00	72.71	AAAA	C
ATOH	116	CE1	TYR	13	45.746	-0.541	52.450	1.00	71.51	AAAA	C
ATOH	117	CD2	TYR	13	48.233	-1.247	51.457	1.00	70.36	AAAA	C
ATOH	118	CE2	TYR	13	47.788	-1.778	52.661	1.00	71.64	AAAA	C
ATOH	119	CD	TYR	13	46.542	-1.420	53.160	1.00	71.31	AAAA	C
ATOH	120	OH	TYR	13	46.144	-1.977	54.358	1.00	63.25	AAAA	O
ATOH	122	C	TYR	13	49.622	1.839	50.198	1.00	65.99	AAAA	C
ATOH	123	O	TYR	13	49.621	2.321	51.354	1.00	65.01	AAAA	O
ATOH	124	H	GLU	14	50.786	1.541	49.594	1.00	63.51	AAAA	H
ATOH	126	CA	GLU	14	52.078	1.681	50.218	1.00	63.51	AAAA	C
ATOH	127	CB	GLU	14	53.174	1.318	49.219	1.00	68.37	AAAA	C
ATOH	128	CG	GLU	14	52.863	-0.078	48.686	1.00	84.62	AAAA	C
ATOH	129	CD	GLU	14	53.990	-0.515	47.754	1.00	92.28	AAAA	C
ATOH	130	OE1	GLU	14	53.945	-0.161	46.573	1.00	94.82	AAAA	O
ATOH	131	HE2	GLU	14	54.920	-1.254	48.361	1.00	98.03	AAAA	H
ATOH	134	C	GLU	14	52.434	3.058	50.753	1.00	61.62	AAAA	C
ATOH	135	O	GLU	14	53.266	3.292	51.644	1.00	62.09	AAAA	O
ATOH	136	H	GLU	15	51.628	4.038	50.349	1.00	57.02	AAAA	H
ATOH	138	CA	GLU	15	51.724	5.399	50.831	1.00	51.71	AAAA	C
ATOH	139	CB	GLU	15	50.861	6.220	49.911	1.00	43.75	AAAA	C
ATOH	140	CG	GLU	15	51.566	6.605	48.648	1.00	59.65	AAAA	C
ATOH	141	CD	GLU	15	51.554	8.105	48.428	1.00	72.96	AAAA	C
ATOH	142	OE1	GLU	15	51.168	9.005	49.184	1.00	80.58	AAAA	O
ATOH	143	HE2	GLU	15	52.016	8.378	47.211	1.00	74.17	AAAA	H
ATOH	146	C	GLU	15	51.219	5.530	52.258	1.00	50.15	AAAA	C
ATOH	147	O	GLU	15	51.576	6.500	52.940	1.00	48.04	AAAA	O
ATOH	148	H	LEU	16	50.440	4.535	52.688	1.00	46.22	AAAA	H
ATOH	150	CA	LEU	16	49.913	4.449	54.019	1.00	45.52	AAAA	C
ATOH	151	CB	LEU	16	48.950	3.295	54.159	1.00	37.73	AAAA	C
ATOH	152	CG	LEU	16	47.502	3.425	53.707	1.00	41.40	AAAA	C
ATOH	153	CD1	LEU	16	46.837	2.063	53.790	1.00	42.43	AAAA	C
ATOH	154	CD2	LEU	16	46.687	4.424	54.545	1.00	35.93	AAAA	C
ATOH	155	C	LEU	16	51.042	4.280	55.039	1.00	51.52	AAAA	C
ATOH	156	O	LEU	16	50.913	4.601	56.235	1.00	52.53	AAAA	O
ATOH	157	H	LYS	17	52.252	3.936	54.560	1.00	51.01	AAAA	H
ATOH	159	CA	LYS	17	53.422	3.914	55.404	1.00	50.73	AAAA	C
ATOH	160	CB	LYS	17	54.609	3.252	54.737	1.00	56.10	AAAA	C
ATOH	161	CG	LYS	17	54.539	1.733	54.831	1.00	62.40	AAAA	C
ATOH	162	CD	LYS	17	54.768	1.278	53.387	1.00	63.85	AAAA	C
ATOH	163	CE	LYS	17	55.316	-0.141	53.426	1.00	68.40	AAAA	C
ATOH	164	HE	LYS	17	56.537	-0.225	52.554	1.00	73.83	AAAA	H
ATOH	168	C	LYS	17	53.944	5.270	55.852	1.00	44.78	AAAA	C
ATOH	169	O	LYS	17	54.492	5.262	56.933	1.00	39.39	AAAA	O
ATOH	170	H	ARG	18	53.524	6.344	55.201	1.00	41.15	AAAA	H
ATOH	172	CA	ARG	18	53.827	7.673	55.676	1.00	43.01	AAAA	C
ATOH	173	CB	ARG	18	53.250	8.702	54.704	1.00	43.97	AAAA	C
ATOH	174	CG	ARG	18	53.888	8.764	53.333	1.00	53.60	AAAA	C
ATOH	175	CD	ARG	18	52.961	9.362	52.269	1.00	60.34	AAAA	C
ATOH	176	HE	ARG	18	52.528	10.703	52.650	1.00	50.00	AAAA	H
ATOH	178	CE	ARG	18	51.628	11.444	52.021	1.00	48.08	AAAA	C
ATOH	179	NH1	ARG	18	51.069	10.941	50.943	1.00	47.96	AAAA	H
ATOH	182	NH2	ARG	18	51.377	12.656	52.555	1.00	43.72	AAAA	H
ATOH	185	C	ARG	18	53.258	7.924	57.077	1.00	44.03	AAAA	C
ATOH	186	O	ARG	18	53.402	9.010	57.644	1.00	45.53	AAAA	O
ATOH	187	H	LEU	19	52.445	7.069	57.632	1.00	46.36	AAAA	H
ATOH	189	CA	LEU	19	51.653	7.282	58.794	1.00	50.25	AAAA	C
ATOH	190	CB	LEU	19	50.184	6.924	58.674	1.00	50.83	AAAA	C
ATOH	191	CG	LEU	19	49.202	7.371	57.608	1.00	46.43	AAAA	C
ATOH	192	CD1	LEU	19	47.946	6.743	57.852	1.00	22.57	AAAA	C
ATOH	193	CD2	LEU	19	49.018	8.866	57.495	1.00	45.88	AAAA	C
ATOH	194	C	LEU	19	52.210	6.428	59.912	1.00	49.07	AAAA	C
ATOH	195	O	LEU	19	51.870	6.810	61.030	1.00	51.54	AAAA	O
ATOH	196	H	GLU	20	53.270	5.708	59.652	1.00	49.35	AAAA	H
ATOH	198	CA	GLU	20	53.819	4.833	60.679	1.00	49.60	AAAA	C
ATOH	199	CB	GLU	20	54.876	3.960	59.982	1.00	57.91	AAAA	C
ATOH	200	CG	GLU	20	55.893	4.840	59.272	1.00	70.16	AAAA	C
ATOH	201	CD	GLU	20	57.095	4.077	58.757	1.00	69.35	AAAA	C
ATOH	202	OE1	GLU	20	58.123	4.795	58.722	1.00	71.39	AAAA	O
ATOH	203	OE2	GLU	20	56.993	2.885	58.420	1.00	72.84	AAAA	C
ATOH	204	C	GLU	20	54.510	5.417	61.989	1.00	43.55	AAAA	C
ATOH	205	O	GLU	20	54.301	4.652	62.937	1.00	40.01	AAAA	O
ATOH	206	H	ASH	21	54.533	6.659	62.207	1.00	41.05	AAAA	H
ATOH	208	CA	ASH	21	55.054	7.204	63.454	1.00	47.17	AAAA	C
ATOH	209	C	ASH	21	54.055	8.141	64.108	1.00	49.76	AAAA	C
ATOH	210	O	ASH	21	54.229	8.456	65.303	1.00	48.16	AAAA	O

09555275 WO 99/28347

3/58

ATOM	211	CB	ASN	21	56.379	8.003	63.290	1.00	59.11	AAAA	C
ATOM	212	CG	ASN	21	57.413	7.951	62.796	1.00	68.38	AAAA	C
ATOM	213	OD1	ASN	21	57.499	8.855	63.122	1.00	58.51	AAAA	O
ATOM	214	ND2	ASN	21	58.348	7.469	61.890	1.00	77.20	AAAA	H
ATOM	216	H	CYS	22	53.129	8.711	63.351	1.00	47.44	AAAA	H
ATOM	218	CA	CYS	22	52.107	9.614	63.879	1.00	42.99	AAAA	C
ATOM	219	C	CYS	22	51.215	9.089	63.021	1.00	40.43	AAAA	C
ATOM	220	O	CYS	22	50.750	7.923	65.069	1.00	36.07	AAAA	O
ATOM	221	CB	CYS	22	51.182	9.921	62.690	1.00	44.82	AAAA	C
ATOM	222	SG	CYS	22	52.076	10.328	61.148	1.00	39.51	AAAA	S
ATOM	223	H	THR	23	51.287	9.801	66.137	1.00	36.24	AAAA	H
ATOM	225	CA	THR	23	50.339	9.482	67.204	1.00	43.51	AAAA	C
ATOM	226	CE	THR	23	50.944	9.481	68.593	1.00	41.38	AAAA	C
ATOM	227	OG1	THR	23	51.410	10.843	68.822	1.00	51.21	AAAA	O
ATOM	229	CG2	THR	23	52.110	8.571	68.838	1.00	33.83	AAAA	C
ATOM	230	C	THR	23	49.250	10.599	67.116	1.00	44.55	AAAA	C
ATOM	231	O	THR	23	48.085	10.414	67.481	1.00	45.95	AAAA	O
ATOM	232	H	VAL	24	49.646	11.797	66.689	1.00	33.03	AAAA	H
ATOM	234	CA	VAL	24	48.732	12.855	66.442	1.00	35.29	AAAA	C
ATOM	235	CB	VAL	24	48.925	13.979	67.456	1.00	30.60	AAAA	C
ATOM	236	CG1	VAL	24	48.056	15.157	67.082	1.00	27.21	AAAA	C
ATOM	237	CG2	VAL	24	48.656	13.566	68.886	1.00	25.37	AAAA	C
ATOM	238	C	VAL	24	48.895	13.447	65.043	1.00	41.52	AAAA	C
ATOM	239	O	VAL	24	49.987	13.963	64.791	1.00	44.40	AAAA	O
ATOM	240	H	ILE	25	47.855	13.450	64.203	1.00	40.13	AAAA	H
ATOM	242	CA	ILE	25	47.908	14.094	62.882	1.00	32.05	AAAA	C
ATOM	243	CB	ILE	25	47.113	13.299	61.853	1.00	25.85	AAAA	C
ATOM	244	CG2	ILE	25	47.027	14.039	60.542	1.00	18.73	AAAA	C
ATOM	245	CG1	ILE	25	47.677	11.896	61.705	1.00	29.80	AAAA	C
ATOM	246	CD1	ILE	25	47.169	11.155	60.471	1.00	27.41	AAAA	C
ATOM	247	C	ILE	25	47.397	15.490	62.941	1.00	32.92	AAAA	C
ATOM	248	O	ILE	25	46.223	15.776	63.213	1.00	40.91	AAAA	O
ATOM	249	H	GLU	26	48.264	16.472	63.042	1.00	36.60	AAAA	H
ATOM	251	CA	GLU	26	47.832	17.847	63.226	1.00	29.24	AAAA	C
ATOM	252	CB	GLU	26	48.875	18.703	63.856	1.00	29.92	AAAA	C
ATOM	253	CG	GLU	26	48.490	20.144	64.116	1.00	38.06	AAAA	C
ATOM	254	CD	GLU	26	49.561	20.762	65.013	1.00	37.39	AAAA	C
ATOM	255	OE1	GLU	26	50.654	20.937	64.489	1.00	41.56	AAAA	O
ATOM	256	OE2	GLU	26	49.571	21.175	66.182	1.00	49.16	AAAA	O
ATOM	257	C	GLU	26	47.413	18.376	61.869	1.00	37.79	AAAA	C
ATOM	258	O	GLU	26	48.161	19.069	61.181	1.00	39.68	AAAA	O
ATOM	259	H	GLY	27	46.117	18.104	61.582	1.00	37.28	AAAA	H
ATOM	261	CA	GLY	27	45.498	18.503	60.320	1.00	31.17	AAAA	C
ATOM	262	C	GLY	27	44.531	17.400	59.893	1.00	33.72	AAAA	C
ATOM	263	O	GLY	27	43.988	16.715	60.775	1.00	33.29	AAAA	O
ATOM	264	H	TYR	28	44.304	17.209	58.604	1.00	29.24	AAAA	H
ATOM	266	CA	TYR	28	43.318	16.189	58.253	1.00	28.93	AAAA	C
ATOM	267	CB	TYR	28	42.403	16.794	57.217	1.00	31.53	AAAA	C
ATOM	268	CG	TYR	28	43.058	17.256	55.962	1.00	31.79	AAAA	C
ATOM	269	CD1	TYR	28	43.704	16.355	55.116	1.00	36.07	AAAA	C
ATOM	270	CE1	TYR	28	44.361	16.706	53.967	1.00	28.91	AAAA	C
ATOM	271	CD2	TYR	28	43.130	18.572	55.606	1.00	30.98	AAAA	C
ATOM	272	CE2	TYR	28	43.769	18.972	54.428	1.00	28.77	AAAA	C
ATOM	273	CG	TYR	28	44.367	18.021	53.652	1.00	31.53	AAAA	C
ATOM	274	OH	TYR	28	44.971	18.425	52.464	1.00	44.74	AAAA	O
ATOM	276	C	TYR	28	43.953	14.946	57.697	1.00	29.23	AAAA	C
ATOM	277	O	TYR	28	45.119	15.147	57.383	1.00	35.58	AAAA	O
ATOM	278	H	LEU	29	43.250	13.900	57.445	1.00	26.63	AAAA	H
ATOM	280	CA	LEU	29	43.764	12.730	56.803	1.00	29.23	AAAA	C
ATOM	281	CB	LEU	29	43.830	11.611	57.856	1.00	27.09	AAAA	C
ATOM	282	CG	LEU	29	44.212	10.258	57.242	1.00	31.90	AAAA	C
ATOM	283	CD1	LEU	29	45.538	10.396	56.469	1.00	35.03	AAAA	C
ATOM	284	CD2	LEU	29	44.551	9.203	58.290	1.00	25.05	AAAA	C
ATOM	285	C	LEU	29	42.897	12.342	55.616	1.00	33.84	AAAA	C
ATOM	286	O	LEU	29	41.689	12.165	55.906	1.00	43.29	AAAA	O
ATOM	287	H	HIS	30	43.389	12.285	54.395	1.00	35.95	AAAA	H
ATOM	289	CA	HIS	30	42.681	11.891	53.197	1.00	34.92	AAAA	C
ATOM	290	CB	HIS	30	42.893	12.801	52.027	1.00	32.85	AAAA	C
ATOM	291	CG	HIS	30	42.372	14.155	52.046	1.00	25.08	AAAA	C
ATOM	292	CD2	HIS	30	41.519	14.753	52.907	1.00	40.88	AAAA	C
ATOM	293	HD1	HIS	30	42.717	15.120	51.128	1.00	33.66	AAAA	H
ATOM	295	CE1	HIS	30	42.080	16.281	51.444	1.00	31.33	AAAA	C
ATOM	296	HE2	HIS	30	41.329	16.093	52.539	1.00	37.27	AAAA	H
ATOM	298	C	HIS	30	43.173	10.538	52.714	1.00	37.68	AAAA	C
ATOM	299	O	HIS	30	44.357	10.388	52.541	1.00	38.70	AAAA	O
ATOM	300	H	ILE	31	42.308	9.542	52.584	1.00	40.02	AAAA	H
ATOM	302	CA	ILE	31	42.750	8.271	51.992	1.00	39.47	AAAA	C
ATOM	303	CB	ILE	31	42.668	7.204	53.063	1.00	37.95	AAAA	C
ATOM	304	CG2	ILE	31	43.161	5.830	52.651	1.00	23.86	AAAA	C
ATOM	305	CG1	ILE	31	43.481	7.555	54.335	1.00	41.66	AAAA	C
ATOM	306	CD1	ILE	31	43.170	6.575	55.473	1.00	28.22	AAAA	C
ATOM	307	C	ILE	31	41.884	9.044	50.755	1.00	46.52	AAAA	C
ATOM	309	O	ILE	31	40.753	7.589	50.827	1.00	43.56	AAAA	O
ATOM	309	H	LEU	32	42.314	9.489	49.556	1.00	49.89	AAAA	H
ATOM	311	CA	LEU	32	41.484	9.235	48.390	1.00	49.77	AAAA	C

0055275-003001

4/58

ATOH	312	CB	LEU	32	41.127	9.515	47.693	1.00	47.49	AAAA	C
ATOH	313	CB	LEU	32	42.991	10.688	47.562	1.00	45.33	AAAA	C
ATOH	314	CD1	LEU	32	41.517	11.812	46.673	1.00	35.77	AAAA	C
ATOH	315	CD2	LEU	32	42.371	11.229	48.960	1.00	49.19	AAAA	C
ATOH	316	C	LEU	32	42.136	7.296	47.353	1.00	51.00	AAAA	C
ATOH	317	O	LEU	32	43.338	7.370	47.186	1.00	41.36	AAAA	O
ATOH	318	H	LEU	33	41.270	6.722	46.497	1.00	50.74	AAAA	H
ATOH	320	CA	LEU	33	41.602	6.175	45.197	1.00	49.92	AAAA	C
ATOH	321	CB	LEU	33	42.091	7.262	44.192	1.00	34.83	AAAA	C
ATOH	322	CG	LEU	33	41.233	8.537	44.164	1.00	33.92	AAAA	C
ATOH	323	CD1	LEU	33	41.892	9.567	43.298	1.00	37.49	AAAA	C
ATOH	324	CD2	LEU	33	39.823	8.313	43.644	1.00	33.01	AAAA	C
ATOH	325	C	LEU	33	42.618	5.073	45.287	1.00	48.35	AAAA	C
ATOH	326	O	LEU	33	43.580	5.077	44.538	1.00	54.14	AAAA	O
ATOH	327	H	ILE	34	42.543	4.212	45.254	1.00	47.61	AAAA	H
ATOH	329	CA	ILE	34	43.523	3.184	46.540	1.00	51.70	AAAA	C
ATOH	330	CB	ILE	34	44.101	3.346	47.963	1.00	57.98	AAAA	C
ATOH	331	CG2	ILE	34	44.538	2.043	48.600	1.00	48.98	AAAA	C
ATOH	332	CG1	ILE	34	45.267	4.371	47.967	1.00	46.70	AAAA	C
ATOH	333	CD1	ILE	34	45.561	4.704	49.439	1.00	66.47	AAAA	C
ATOH	334	C	ILE	34	42.829	1.844	46.498	1.00	59.85	AAAA	C
ATOH	335	O	ILE	34	41.726	1.531	46.856	1.00	60.11	AAAA	O
ATOH	336	H	SER	35	43.622	0.833	46.013	1.00	67.79	AAAA	H
ATOH	338	CA	SER	35	43.048	-0.511	45.922	1.00	68.80	AAAA	C
ATOH	339	CG	SER	35	42.767	-0.882	44.469	1.00	64.16	AAAA	C
ATOH	340	OB	SER	35	41.731	-1.846	44.498	1.00	75.76	AAAA	O
ATOH	342	C	SER	35	43.929	-1.564	46.537	1.00	70.73	AAAA	C
ATOH	343	O	SER	35	44.885	-1.954	45.929	1.00	73.65	AAAA	O
ATOH	344	H	LYS	36	43.687	-2.017	47.740	1.00	74.75	AAAA	H
ATOH	346	CA	LYS	36	44.465	-3.014	48.421	1.00	76.99	AAAA	C
ATOH	347	CB	LYS	36	44.046	-3.131	49.885	1.00	81.22	AAAA	C
ATOH	348	CG	LYS	36	45.147	-3.654	50.775	1.00	78.87	AAAA	C
ATOH	349	CD	LYS	36	44.693	-4.575	51.887	1.00	81.39	AAAA	C
ATOH	350	CE	LYS	36	44.899	-6.025	51.492	1.00	89.38	AAAA	C
ATOH	351	HD	LYS	36	44.371	-6.989	52.506	1.00	91.63	AAAA	H
ATOH	355	C	LYS	36	44.252	-4.362	47.753	1.00	81.41	AAAA	C
ATOH	356	O	LYS	36	43.145	-4.772	47.451	1.00	78.20	AAAA	O
ATOH	357	H	ALA	37	45.371	-5.080	47.615	1.00	88.27	AAAA	H
ATOH	359	CA	ALA	37	45.361	-6.396	46.986	1.00	90.10	AAAA	C
ATOH	360	CB	ALA	37	46.700	-6.655	46.327	1.00	95.49	AAAA	C
ATOH	361	C	ALA	37	45.011	-7.473	47.995	1.00	92.36	AAAA	C
ATOH	362	O	ALA	37	45.668	-7.627	49.012	1.00	92.35	AAAA	O
ATOH	363	H	SER	38	44.031	-8.301	47.622	1.00	94.31	AAAA	H
ATOH	365	CA	SER	38	43.528	-9.352	48.484	1.00	95.70	AAAA	C
ATOH	366	CB	SER	38	42.405	-10.164	47.058	1.00	97.44	AAAA	C
ATOH	367	OG	SER	38	42.061	-11.176	48.814	1.00	103.48	AAAA	O
ATOH	369	C	SER	38	44.702	-10.263	48.821	1.00	96.97	AAAA	C
ATOH	370	O	SER	38	44.761	-10.778	49.924	1.00	98.06	AAAA	O
ATOH	371	H	ASP	39	45.584	-10.415	47.852	1.00	97.99	AAAA	H
ATOH	373	CA	ASP	39	46.821	-11.148	47.980	1.00	99.19	AAAA	C
ATOH	374	CB	ASP	39	47.579	-11.059	46.652	1.00	102.13	AAAA	C
ATOH	375	CG	ASP	39	47.696	-12.387	45.949	0.01	101.22	AAAA	C
ATOH	376	OD1	ASP	39	46.844	-12.978	45.623	0.01	101.40	AAAA	O
ATOH	377	OD2	ASP	39	48.833	-12.848	45.718	0.01	101.41	AAAA	O
ATOH	378	C	ASP	39	47.660	-10.564	49.105	1.00	99.40	AAAA	C
ATOH	379	O	ASP	39	47.692	-11.056	50.224	1.00	99.15	AAAA	O
ATOH	380	H	TYR	40	48.354	-9.479	48.818	1.00	100.96	AAAA	H
ATOH	382	CA	TYR	40	49.120	-8.706	49.802	1.00	101.16	AAAA	C
ATOH	383	CB	TYR	40	49.511	-7.393	49.130	1.00	103.67	AAAA	C
ATOH	384	CG	TYR	40	50.159	-6.281	49.887	1.00	107.81	AAAA	C
ATOH	385	CD1	TYR	40	50.931	-5.325	49.228	1.00	109.56	AAAA	C
ATOH	386	CE1	TYR	40	51.540	-4.280	49.910	1.00	109.67	AAAA	C
ATOH	387	CD2	TYR	40	50.044	-6.115	51.254	1.00	109.29	AAAA	C
ATOH	388	CE2	TYR	40	50.618	-5.102	51.976	1.00	109.83	AAAA	C
ATOH	389	CB	TYR	40	51.372	-4.191	51.276	1.00	110.16	AAAA	C
ATOH	390	OH	TYR	40	51.999	-3.127	51.893	1.00	109.84	AAAA	O
ATOH	392	C	TYR	40	48.343	-8.529	51.100	1.00	99.10	AAAA	C
ATOH	393	O	TYR	40	47.168	-8.182	51.183	1.00	99.05	AAAA	O
ATOH	394	H	LYS	41	49.041	-8.653	52.218	1.00	98.62	AAAA	H
ATOH	396	CA	LYS	41	48.443	-9.549	53.546	1.00	100.30	AAAA	C
ATOH	397	CB	LYS	41	49.385	-9.160	54.599	1.00	104.42	AAAA	C
ATOH	398	CG	LYS	41	49.218	-10.649	54.814	0.01	101.06	AAAA	C
ATOH	399	CD	LYS	41	47.776	-11.107	54.919	0.01	100.66	AAAA	C
ATOH	400	CE	LYS	41	47.205	-10.880	56.308	0.01	99.86	AAAA	C
ATOH	401	HD	LYS	41	47.882	-11.728	57.328	0.01	99.62	AAAA	H
ATOH	405	C	LYS	41	48.035	-7.136	53.947	1.00	98.99	AAAA	C
ATOH	406	O	LYS	41	47.615	-6.371	53.057	1.00	103.33	AAAA	O
ATOH	407	H	SER	42	48.198	-6.754	55.221	1.00	91.75	AAAA	H
ATOH	409	CA	SER	42	47.825	-5.412	55.604	1.00	85.06	AAAA	C
ATOH	410	CB	SER	42	46.385	-5.520	56.147	1.00	95.33	AAAA	C
ATOH	411	OG	SER	42	46.547	-6.140	57.426	1.00	104.63	AAAA	O
ATOH	413	C	SER	42	49.628	-4.715	56.687	1.00	80.78	AAAA	C
ATOH	414	O	SER	42	49.326	-5.250	57.538	1.00	81.03	AAAA	O
ATOH	415	H	TYR	43	48.495	-3.395	56.676	1.00	73.93	AAAA	H
ATOH	417	CA	TYR	43	49.069	-2.488	57.635	1.00	67.25	AAAA	C

09555275 WO 99/28347

5/58

ATOM	418	CS	TYR	43	49.026	-1.110	55.965	1.00	65.37	AAAA	C
ATOM	419	CS	TYR	43	49.953	-1.021	55.707	1.00	63.92	AAAA	C
ATOM	420	CD1	TYR	43	50.931	-1.935	55.406	1.00	63.87	AAAA	C
ATOM	421	CE1	TYR	43	51.698	-1.781	54.274	1.00	66.09	AAAA	C
ATOM	422	CD2	TYR	43	49.770	0.050	54.870	1.00	63.35	AAAA	C
ATOM	423	CE2	TYR	43	50.536	0.214	53.728	1.00	67.62	AAAA	C
ATOM	424	CS	TYR	43	51.508	-0.712	53.432	1.00	66.94	AAAA	C
ATOM	425	OH	TYR	43	52.262	-0.563	52.395	1.00	65.23	AAAA	O
ATOM	427	C	TYR	43	48.248	-2.381	58.925	1.00	64.98	AAAA	C
ATOM	428	O	TYR	43	47.088	-2.851	59.035	1.00	62.90	AAAA	O
ATOM	429	H	ARG	44	48.782	-1.567	59.825	1.00	57.88	AAAA	H
ATOM	431	CA	ARG	44	48.019	-1.285	61.039	1.00	56.45	AAAA	C
ATOM	432	CB	ARG	44	47.842	-2.611	61.760	1.00	46.51	AAAA	C
ATOM	433	CG	ARG	44	47.915	-2.375	63.244	1.00	54.66	AAAA	C
ATOM	434	CD	ARG	44	46.885	-3.327	63.986	1.00	58.54	AAAA	C
ATOM	435	NE	ARG	44	47.090	-2.927	65.403	1.00	68.56	AAAA	H
ATOM	437	CE	ARG	44	46.464	-3.536	66.395	1.00	64.82	AAAA	C
ATOM	438	HH1	ARG	44	45.644	-4.520	60.132	1.00	61.53	AAAA	H
ATOM	441	HH2	ARG	44	46.674	-3.139	67.628	1.00	66.03	AAAA	H
ATOM	444	C	ARG	44	48.911	-0.285	61.845	1.00	55.55	AAAA	C
ATOM	445	O	ARG	44	49.916	-0.552	62.320	1.00	58.43	AAAA	O
ATOM	446	H	PHE	45	48.276	0.866	62.139	1.00	51.13	AAAA	H
ATOM	448	CA	PHE	45	48.865	1.944	62.863	1.00	45.94	AAAA	C
ATOM	449	CB	PHE	45	48.774	3.249	61.978	1.00	35.89	AAAA	C
ATOM	450	CG	PHE	45	49.106	2.937	60.554	1.00	30.29	AAAA	C
ATOM	451	CD1	PHE	45	50.373	3.051	59.998	1.00	45.72	AAAA	C
ATOM	452	CD2	PHE	45	48.127	2.428	59.728	1.00	35.95	AAAA	C
ATOM	453	CE1	PHE	45	50.653	2.715	58.672	1.00	47.76	AAAA	C
ATOM	454	CE2	PHE	45	48.358	2.096	58.406	1.00	39.92	AAAA	C
ATOM	455	CE	PHE	45	49.610	2.244	57.967	1.00	46.44	AAAA	C
ATOM	456	O	PHE	45	48.191	2.123	64.203	1.00	41.65	AAAA	O
ATOM	457	O	PHE	45	47.708	3.223	64.475	1.00	40.99	AAAA	O
ATOM	458	H	PRO	46	48.494	1.338	65.212	1.00	43.20	AAAA	H
ATOM	459	CD	PRO	46	49.300	0.097	65.132	1.00	47.74	AAAA	C
ATOM	460	CA	PRO	46	48.032	1.530	66.560	1.00	43.34	AAAA	C
ATOM	461	CB	PRO	46	48.514	0.319	67.380	1.00	44.92	AAAA	C
ATOM	462	CG	PRO	46	49.404	-0.464	66.514	1.00	45.48	AAAA	C
ATOM	463	C	PRO	46	48.558	2.768	67.233	1.00	41.30	AAAA	C
ATOM	464	O	PRO	46	48.329	2.830	68.443	1.00	44.57	AAAA	O
ATOM	465	H	LYS	47	49.450	3.533	66.676	1.00	39.33	AAAA	H
ATOM	467	CA	LYS	47	49.991	4.679	67.362	1.00	38.10	AAAA	C
ATOM	468	CB	LYS	47	51.378	4.981	66.852	1.00	49.07	AAAA	C
ATOM	469	CG	LYS	47	52.032	3.995	65.902	1.00	67.95	AAAA	C
ATOM	470	CD	LYS	47	53.563	3.976	65.891	1.00	61.33	AAAA	C
ATOM	471	CE	LYS	47	54.115	4.648	67.147	1.00	72.19	AAAA	C
ATOM	472	NE	LYS	47	54.024	6.132	66.874	1.00	79.29	AAAA	H
ATOM	476	C	LYS	47	49.014	5.848	67.195	1.00	39.76	AAAA	C
ATOM	477	O	LYS	47	49.189	6.827	67.952	1.00	35.45	AAAA	O
ATOM	478	H	LEU	48	48.300	5.886	68.053	1.00	38.45	AAAA	H
ATOM	480	CA	LEU	48	47.370	7.004	65.890	1.00	40.40	AAAA	C
ATOM	481	CB	LEU	48	46.823	6.919	64.389	1.00	28.59	AAAA	C
ATOM	482	CG	LEU	48	45.947	7.967	63.787	1.00	31.04	AAAA	C
ATOM	483	CD1	LEU	48	46.637	9.310	63.878	1.00	36.96	AAAA	C
ATOM	484	CD2	LEU	48	45.591	7.738	62.294	1.00	34.49	AAAA	C
ATOM	485	C	LEU	48	46.166	7.022	66.807	1.00	42.01	AAAA	C
ATOM	486	O	LEU	48	45.271	6.187	66.863	1.00	36.48	AAAA	O
ATOM	487	H	THR	49	46.138	8.041	67.673	1.00	38.95	AAAA	H
ATOM	489	CA	THR	49	45.045	8.151	68.574	1.00	37.06	AAAA	C
ATOM	490	CB	THR	49	45.548	8.207	70.034	1.00	48.69	AAAA	C
ATOM	491	CG1	THR	49	46.396	9.340	70.225	1.00	35.50	AAAA	O
ATOM	493	CG2	THR	49	46.230	6.957	70.529	1.00	31.99	AAAA	C
ATOM	494	C	THR	49	44.230	9.425	68.321	1.00	39.48	AAAA	C
ATOM	495	O	THR	49	43.111	9.451	68.837	1.00	34.49	AAAA	O
ATOM	496	H	VAL	50	44.735	10.415	67.605	1.00	37.32	AAAA	H
ATOM	498	CA	VAL	50	43.995	11.664	67.418	1.00	38.72	AAAA	C
ATOM	499	CB	VAL	50	44.293	12.708	68.503	1.00	37.24	AAAA	C
ATOM	500	CG1	VAL	50	43.630	14.066	68.208	1.00	29.96	AAAA	C
ATOM	501	CG2	VAL	50	43.884	12.311	69.913	1.00	32.52	AAAA	C
ATOM	502	C	VAL	50	44.271	12.305	65.048	1.00	37.03	AAAA	C
ATOM	503	O	VAL	50	45.195	11.863	65.431	1.00	37.96	AAAA	O
ATOM	504	H	ILE	51	43.319	12.939	65.415	1.00	37.49	AAAA	H
ATOM	506	CA	ILE	51	43.301	13.575	64.133	1.00	32.48	AAAA	C
ATOM	507	CB	ILE	51	42.346	12.864	63.152	1.00	34.51	AAAA	C
ATOM	508	CG2	ILE	51	41.995	13.802	61.978	1.00	32.31	AAAA	C
ATOM	509	CG1	ILE	51	43.026	11.611	62.671	1.00	30.78	AAAA	C
ATOM	510	CD1	ILE	51	42.358	10.559	61.815	1.00	19.69	AAAA	C
ATOM	511	C	ILE	51	42.659	14.939	64.431	1.00	34.14	AAAA	C
ATOM	512	O	ILE	51	41.546	14.830	64.923	1.00	29.08	AAAA	O
ATOM	513	H	THR	52	43.342	16.058	64.239	1.00	33.93	AAAA	H
ATOM	515	CA	THR	52	42.806	17.305	64.719	1.00	33.83	AAAA	C
ATOM	516	CB	THR	52	43.961	18.339	64.939	1.00	35.39	AAAA	C
ATOM	517	CG1	THR	52	44.726	18.567	63.781	1.00	41.28	AAAA	O
ATOM	519	CG2	THR	52	44.775	17.926	66.134	1.00	22.01	AAAA	C
ATOM	520	C	THR	52	41.741	17.951	63.853	1.00	39.02	AAAA	C
ATOM	521	O	THR	52	41.207	19.030	64.243	1.00	38.88	AAAA	O

0955275-083001

6/58

ATOM	522	H	GLU	53	41.524	17.477	62.639	1.00	35.93	AAAA	H
ATOM	524	CA	GLU	53	40.434	17.053	61.795	1.00	38.38	AAAA	C
ATOM	525	CB	GLU	53	41.064	18.512	60.483	1.00	29.76	AAAA	C
ATOM	526	CG	GLU	53	42.061	19.552	60.834	1.00	30.48	AAAA	C
ATOM	527	CD	GLU	53	42.517	20.396	59.697	1.00	40.82	AAAA	C
ATOM	528	OE1	GLU	53	42.638	19.908	58.556	1.00	57.56	AAAA	O
ATOM	529	OE2	GLU	53	42.799	21.559	59.931	1.00	35.74	AAAA	O
ATOM	530	C	GLU	53	39.506	15.799	61.388	1.00	39.19	AAAA	C
ATOM	531	O	GLU	53	38.922	16.311	62.386	1.00	38.95	AAAA	O
ATOM	532	H	TYR	54	39.639	15.353	60.102	1.00	30.60	AAAA	H
ATOM	534	CA	TYR	54	38.666	15.342	59.713	1.00	35.96	AAAA	C
ATOM	535	CB	TYR	54	37.654	15.802	58.635	1.00	30.71	AAAA	C
ATOM	536	CG	TYR	54	38.247	16.476	57.389	1.00	21.18	AAAA	C
ATOM	537	CD1	TYR	54	38.487	15.733	56.305	1.00	20.22	AAAA	C
ATOM	538	OE1	TYR	54	38.980	16.743	55.086	1.00	21.04	AAAA	C
ATOM	539	CD2	TYR	54	38.577	17.844	57.307	1.00	23.97	AAAA	C
ATOM	540	OE2	TYR	54	39.049	18.384	56.124	1.00	24.69	AAAA	C
ATOM	541	CG	TYR	54	39.263	17.569	55.032	1.00	26.72	AAAA	C
ATOM	542	OH	TYR	54	39.763	18.047	53.847	1.00	37.55	AAAA	O
ATOM	544	C	TYR	54	39.405	14.115	59.142	1.00	33.87	AAAA	C
ATOM	545	O	TYR	54	40.513	14.360	58.678	1.00	30.40	AAAA	O
ATOM	546	H	LEU	55	38.683	13.021	59.004	1.00	23.24	AAAA	H
ATOM	548	CA	LEU	55	39.111	11.812	58.454	1.00	30.08	AAAA	C
ATOM	549	CB	LEU	55	39.011	10.663	59.510	1.00	14.78	AAAA	C
ATOM	550	CG	LEU	55	39.349	9.314	58.818	1.00	25.98	AAAA	C
ATOM	551	CD1	LEU	55	40.668	9.477	58.040	1.00	26.66	AAAA	C
ATOM	552	CD2	LEU	55	39.496	8.093	59.705	1.00	14.45	AAAA	C
ATOM	553	C	LEU	55	38.201	11.548	57.238	1.00	37.43	AAAA	C
ATOM	554	O	LEU	55	36.995	11.632	57.427	1.00	39.55	AAAA	O
ATOM	555	H	LEU	55	38.700	11.348	56.035	1.00	41.83	AAAA	H
ATOM	557	CA	LEU	56	37.955	11.201	54.789	1.00	36.98	AAAA	C
ATOM	558	CB	LEU	56	37.998	12.446	53.949	1.00	33.29	AAAA	C
ATOM	559	CG	LEU	56	37.984	12.514	52.416	1.00	30.35	AAAA	C
ATOM	560	CD1	LEU	56	37.076	11.460	51.921	1.00	47.95	AAAA	C
ATOM	561	CD2	LEU	56	37.286	13.807	51.985	1.00	33.47	AAAA	C
ATOM	562	C	LEU	56	38.595	10.047	54.008	1.00	39.75	AAAA	C
ATOM	563	O	LEU	56	39.714	10.205	53.547	1.00	44.38	AAAA	O
ATOM	564	H	LEU	57	37.846	9.608	53.800	1.00	36.68	AAAA	H
ATOM	566	CA	LEU	57	38.133	7.832	53.034	1.00	41.53	AAAA	C
ATOM	567	CB	LEU	57	37.944	6.588	53.916	1.00	37.00	AAAA	C
ATOM	568	CG	LEU	57	39.064	6.534	55.026	1.00	36.13	AAAA	C
ATOM	569	CD1	LEU	57	38.513	6.890	56.417	1.00	33.26	AAAA	C
ATOM	570	CD2	LEU	57	39.630	5.162	55.039	1.00	24.11	AAAA	C
ATOM	571	C	LEU	57	37.203	7.825	51.838	1.00	46.03	AAAA	C
ATOM	572	O	LEU	57	35.985	7.993	51.969	1.00	44.78	AAAA	O
ATOM	573	H	PHE	58	37.792	7.898	50.642	1.00	47.07	AAAA	H
ATOM	575	CA	PHE	58	36.895	8.002	49.467	1.00	48.75	AAAA	C
ATOM	576	CB	PHE	58	36.704	9.448	49.102	1.00	46.67	AAAA	C
ATOM	577	CG	PHE	58	36.447	9.815	47.692	1.00	54.66	AAAA	C
ATOM	578	CD1	PHE	58	37.413	9.706	46.697	1.00	55.19	AAAA	C
ATOM	579	CD2	PHE	58	35.200	10.301	47.326	1.00	53.86	AAAA	C
ATOM	580	OE1	PHE	59	37.124	10.063	45.395	1.00	50.36	AAAA	C
ATOM	581	OE2	PHE	58	34.985	10.655	46.011	1.00	41.84	AAAA	C
ATOM	582	CG	PHE	58	35.877	10.521	45.037	1.00	46.50	AAAA	C
ATOM	583	C	PHE	58	37.351	7.652	48.379	1.00	49.71	AAAA	C
ATOM	584	O	PHE	58	38.487	7.073	47.934	1.00	52.16	AAAA	O
ATOM	585	H	ARG	59	36.471	6.118	47.944	1.00	44.26	AAAA	H
ATOM	587	CA	ARG	59	36.753	5.281	46.815	1.00	40.80	AAAA	C
ATOM	588	CB	ARG	59	36.911	5.993	45.427	1.00	23.79	AAAA	C
ATOM	589	CG	ARG	59	35.869	7.020	45.121	1.00	46.53	AAAA	C
ATOM	590	CD	ARG	59	35.921	7.562	43.706	1.00	37.64	AAAA	C
ATOM	591	HE	ARG	59	35.822	6.422	42.806	1.00	49.23	AAAA	H
ATOM	593	CG	ARG	59	34.950	5.832	42.036	1.00	41.36	AAAA	C
ATOM	594	HH1	ARG	59	33.702	6.277	41.931	1.00	47.00	AAAA	H
ATOM	597	HH2	ARG	59	35.237	4.729	41.327	1.00	42.58	AAAA	H
ATOM	600	C	ARG	59	38.037	4.494	47.049	1.00	42.25	AAAA	C
ATOM	601	O	ARG	59	38.981	4.513	46.232	1.00	44.11	AAAA	O
ATOM	602	H	VAL	60	38.061	3.625	48.023	1.00	40.84	AAAA	H
ATOM	604	CA	VAL	60	39.101	2.743	48.341	1.00	39.14	AAAA	C
ATOM	605	CB	VAL	60	39.624	3.066	49.751	1.00	40.12	AAAA	C
ATOM	606	CG1	VAL	60	40.407	1.972	50.296	1.00	35.05	AAAA	C
ATOM	607	CG2	VAL	60	40.425	4.352	49.893	1.00	28.86	AAAA	C
ATOM	608	C	VAL	60	38.539	1.337	48.368	1.00	43.56	AAAA	C
ATOM	609	O	VAL	60	37.535	1.224	49.072	1.00	47.66	AAAA	O
ATOM	610	H	ALA	61	39.094	0.371	47.659	1.00	41.92	AAAA	H
ATOM	612	CA	ALA	61	38.617	-0.992	47.749	1.00	42.05	AAAA	C
ATOM	613	CB	ALA	61	38.302	-1.483	46.364	1.00	52.40	AAAA	C
ATOM	614	C	ALA	61	39.613	-1.934	48.386	1.00	43.08	AAAA	C
ATOM	615	O	ALA	61	40.757	-1.602	48.670	1.00	50.59	AAAA	O
ATOM	616	H	GLY	62	39.200	-3.105	48.849	1.00	45.71	AAAA	H
ATOM	618	CA	GLY	62	40.136	-4.079	49.385	1.00	45.39	AAAA	C
ATOM	619	C	GLY	62	40.262	-3.902	50.872	1.00	48.04	AAAA	C
ATOM	620	O	GLY	62	40.587	-4.835	51.604	1.00	52.34	AAAA	O
ATOM	621	H	LEU	63	39.985	-2.734	51.385	1.00	46.90	AAAA	H
ATOM	623	CA	LEU	63	40.003	-2.443	52.805	1.00	49.11	AAAA	C

7/58

ATOM	624	CB	LEU	63	40.274	-0.953	53.027	1.00	41.41	AAAA	C
ATOM	625	CG	LEU	63	40.265	-0.423	54.443	1.00	53.41	AAAA	C
ATOM	626	CD1	LEU	63	41.172	-1.164	55.416	1.00	48.27	AAAA	C
ATOM	627	CD2	LEU	63	40.637	1.047	54.246	1.00	50.51	AAAA	C
ATOM	628	C	LEU	63	38.643	-2.081	53.323	1.00	54.20	AAAA	C
ATOM	629	O	LEU	63	37.587	-2.430	52.037	1.00	57.73	AAAA	O
ATOM	630	H	GLU	64	38.658	-3.852	54.190	1.00	53.97	AAAA	H
ATOM	632	CA	GLU	64	37.462	-4.448	54.742	1.00	56.96	AAAA	C
ATOM	633	CB	GLU	64	37.689	-5.956	54.734	1.00	65.33	AAAA	C
ATOM	634	CG	GLU	64	37.832	-6.484	53.293	1.00	75.14	AAAA	C
ATOM	635	CD	GLU	64	37.104	-7.940	53.128	1.00	78.10	AAAA	C
ATOM	636	CE1	GLU	64	37.424	-8.693	54.132	1.00	63.93	AAAA	O
ATOM	637	CE2	GLU	64	37.036	-8.320	51.978	1.00	88.77	AAAA	O
ATOM	638	C	GLU	64	37.096	-4.007	56.163	1.00	57.12	AAAA	C
ATOM	639	O	GLU	64	35.986	-4.332	56.600	1.00	59.82	AAAA	O
ATOM	640	H	SER	65	37.766	-3.042	56.761	1.00	50.64	AAAA	H
ATOM	642	CA	SER	65	37.539	-2.523	58.060	1.00	47.19	AAAA	C
ATOM	643	CB	SER	65	37.743	-3.596	59.139	1.00	49.24	AAAA	C
ATOM	644	CG	SER	65	37.501	-2.971	60.429	1.00	50.90	AAAA	O
ATOM	646	C	SER	65	38.516	-1.405	58.432	1.00	48.35	AAAA	C
ATOM	647	O	SER	65	39.716	-1.692	58.374	1.00	52.75	AAAA	C
ATOM	648	H	LEU	66	38.054	-0.289	58.984	1.00	41.03	AAAA	H
ATOM	650	CA	LEU	66	38.956	0.758	59.405	1.00	41.91	AAAA	C
ATOM	651	CB	LEU	66	38.247	2.083	59.498	1.00	25.25	AAAA	C
ATOM	652	CG	LEU	66	37.283	2.476	58.402	1.00	34.49	AAAA	C
ATOM	653	CD1	LEU	66	36.974	3.951	58.512	1.00	30.81	AAAA	C
ATOM	654	CD2	LEU	66	37.767	2.200	56.994	1.00	34.34	AAAA	C
ATOM	655	C	LEU	66	39.646	0.462	60.734	1.00	45.39	AAAA	C
ATOM	656	O	LEU	66	40.762	0.947	60.927	1.00	41.05	AAAA	O
ATOM	657	H	GLY	67	39.000	-0.346	61.533	1.00	45.21	AAAA	H
ATOM	659	CA	GLY	67	39.773	-0.672	62.799	1.00	48.14	AAAA	C
ATOM	660	C	GLY	67	40.998	-1.508	62.445	1.00	44.51	AAAA	C
ATOM	661	O	GLY	67	41.855	-1.724	63.287	1.00	45.42	AAAA	O
ATOM	662	H	ASP	68	41.013	-2.189	61.309	1.00	47.60	AAAA	H
ATOM	664	CA	ASP	68	42.194	-2.834	60.738	1.00	50.99	AAAA	C
ATOM	665	CB	ASP	68	42.012	-3.417	59.361	1.00	39.43	AAAA	C
ATOM	666	CG	ASP	68	41.205	-4.678	59.311	1.00	45.82	AAAA	C
ATOM	667	OD1	ASP	68	40.912	-5.341	60.320	1.00	44.69	AAAA	O
ATOM	668	OD2	ASP	68	40.819	-5.065	58.187	1.00	47.23	AAAA	O
ATOM	669	C	ASP	68	43.363	-1.837	60.596	1.00	45.89	AAAA	C
ATOM	670	O	ASP	68	44.436	-2.269	60.903	1.00	44.84	AAAA	O
ATOM	671	H	LEU	69	43.145	-0.609	60.247	1.00	42.49	AAAA	H
ATOM	673	CA	LEU	69	44.175	0.352	60.048	1.00	45.80	AAAA	C
ATOM	674	CB	LEU	69	43.920	1.393	58.945	1.00	45.25	AAAA	C
ATOM	675	CG	LEU	69	43.902	0.882	57.494	1.00	54.25	AAAA	C
ATOM	676	CD1	LEU	69	43.541	2.037	56.565	1.00	47.26	AAAA	C
ATOM	677	CD2	LEU	69	45.211	0.200	57.113	1.00	50.76	AAAA	C
ATOM	678	C	LEU	69	44.347	1.107	61.350	1.00	49.50	AAAA	C
ATOM	679	O	LEU	69	45.470	1.210	61.851	1.00	54.51	AAAA	O
ATOM	680	H	PHE	70	43.296	1.737	61.869	1.00	44.60	AAAA	H
ATOM	682	CA	PHE	70	43.423	2.564	63.046	1.00	39.67	AAAA	C
ATOM	683	CB	PHE	70	42.987	3.973	62.700	1.00	26.08	AAAA	C
ATOM	684	CG	PHE	70	43.465	4.501	61.390	1.00	45.32	AAAA	C
ATOM	685	CD1	PHE	70	42.532	4.748	60.384	1.00	47.41	AAAA	C
ATOM	686	CD2	PHE	70	44.815	4.767	61.130	1.00	48.77	AAAA	C
ATOM	687	CE1	PHE	70	42.945	5.263	59.159	1.00	56.16	AAAA	C
ATOM	688	CE2	PHE	70	45.229	5.256	59.895	1.00	47.24	AAAA	C
ATOM	689	C2	PHE	70	44.293	5.506	58.896	1.00	49.54	AAAA	C
ATOM	690	C	PHE	70	42.655	1.999	64.219	1.00	40.09	AAAA	C
ATOM	691	O	PHE	70	41.874	2.734	64.839	1.00	35.74	AAAA	O
ATOM	692	H	PRO	71	43.053	0.852	64.768	1.00	39.19	AAAA	H
ATOM	693	CD	PRO	71	44.269	0.058	64.411	1.00	39.94	AAAA	C
ATOM	694	CA	PRO	71	42.444	0.237	65.899	1.00	35.30	AAAA	C
ATOM	695	CB	PRO	71	43.308	-0.983	66.246	1.00	38.03	AAAA	C
ATOM	696	CG	PRO	71	44.669	-0.564	65.717	1.00	38.36	AAAA	C
ATOM	697	C	PRO	71	42.453	1.089	67.126	1.00	33.72	AAAA	C
ATOM	698	O	PRO	71	42.005	0.630	68.159	1.00	39.32	AAAA	O
ATOM	699	H	ASH	72	43.058	2.220	67.231	1.00	36.55	AAAA	H
ATOM	701	CA	ASH	72	43.204	3.032	68.401	1.00	32.60	AAAA	C
ATOM	702	CB	ASH	72	44.637	2.916	68.962	1.00	36.89	AAAA	C
ATOM	703	CG	ASH	72	44.735	1.638	69.761	1.00	47.03	AAAA	C
ATOM	704	OD1	ASH	72	44.644	1.619	70.979	1.00	64.42	AAAA	O
ATOM	705	HD2	ASH	72	44.880	0.475	69.169	1.00	63.17	AAAA	H
ATOM	708	C	ASH	72	42.875	4.477	68.135	1.00	30.11	AAAA	C
ATOM	709	O	ASH	72	43.099	5.201	69.104	1.00	36.53	AAAA	O
ATOM	710	H	LEU	73	42.309	4.809	66.978	1.00	27.62	AAAA	H
ATOM	712	CA	LEU	73	41.940	6.207	66.730	1.00	34.07	AAAA	C
ATOM	713	CB	LEU	73	41.476	6.373	65.292	1.00	28.37	AAAA	C
ATOM	714	CG	LEU	73	40.819	7.713	64.882	1.00	29.33	AAAA	C
ATOM	715	CD1	LEU	73	41.910	8.721	64.963	1.00	31.86	AAAA	C
ATOM	716	CD2	LEU	73	40.202	7.518	63.470	1.00	32.07	AAAA	C
ATOM	717	C	LEU	73	40.929	6.569	67.817	1.00	32.14	AAAA	C
ATOM	718	O	LEU	73	40.073	5.737	68.081	1.00	35.00	AAAA	O
ATOM	719	H	THR	74	41.981	7.585	68.592	1.00	29.47	AAAA	H
ATOM	721	CA	THR	74	40.150	7.826	69.683	1.00	34.80	AAAA	C

00555275-003001

ATOM	722	CB	THR	74	41.028	7.744	70.952	1.00	46.09
ATOM	723	CG1	THR	74	41.729	6.485	70.880	1.00	46.30
ATOM	725	CG2	THR	74	40.262	7.931	72.253	1.00	39.45
ATOM	726	C	THR	74	39.424	9.155	69.602	1.00	35.48
ATOM	727	O	THR	74	38.270	9.322	70.077	1.00	35.32
ATOM	728	H	VAL	75	40.047	10.199	69.073	1.00	29.80
ATOM	730	CA	VAL	75	39.351	11.474	68.992	1.00	34.91
ATOM	731	CB	VAL	75	39.856	12.445	69.955	1.00	26.03
ATOM	732	CG1	VAL	75	39.173	13.801	69.934	1.00	24.51
ATOM	733	CG2	VAL	75	39.675	11.910	71.366	1.00	19.87
ATOM	734	C	VAL	75	39.613	12.045	67.494	1.00	37.57
ATOM	735	O	VAL	75	40.724	11.808	67.022	1.00	35.99
ATOM	736	H	ILE	76	38.600	12.555	66.796	1.00	35.91
ATOM	738	CA	ILE	76	38.696	13.340	65.592	1.00	31.48
ATOM	739	CB	ILE	76	37.931	12.769	64.492	1.00	29.66
ATOM	740	CG2	ILE	76	37.856	13.630	63.209	1.00	19.54
ATOM	741	CG1	ILE	76	38.222	11.314	64.277	1.00	29.52
ATOM	742	CD1	ILE	76	37.149	10.556	63.478	1.00	28.85
ATOM	743	C	ILE	76	38.157	14.719	66.000	1.00	33.84
ATOM	744	O	ILE	76	36.987	14.777	66.274	1.00	38.84
ATOM	745	H	ARG	77	38.906	15.733	66.230	1.00	39.32
ATOM	747	CA	ARG	77	38.605	16.901	67.021	1.00	30.82
ATOM	748	CB	ARG	77	39.961	17.475	67.461	1.00	25.62
ATOM	749	CG	ARG	77	39.993	18.836	68.058	1.00	52.42
ATOM	750	CD	ARG	77	41.290	18.957	68.908	1.00	49.10
ATOM	751	NE	ARG	77	41.411	17.817	69.773	1.00	39.23
ATOM	753	C	ARG	77	40.977	18.016	71.064	1.00	48.79
ATOM	754	HH1	ARG	77	40.440	19.104	71.610	1.00	30.34
ATOM	757	HH2	ARG	77	41.661	17.012	71.941	1.00	40.38
ATOM	760	C	ARG	77	37.643	17.733	66.226	1.00	31.75
ATOM	761	O	ARG	77	36.944	18.637	66.664	1.00	31.40
ATOM	762	H	GLY	78	37.688	17.661	64.884	1.00	32.87
ATOM	764	CA	GLY	78	36.982	18.409	63.950	1.00	16.23
ATOM	765	C	GLY	78	37.199	19.880	64.063	1.00	31.58
ATOM	766	O	GLY	78	36.363	20.775	63.674	1.00	34.03
ATOM	767	H	TRP	79	38.439	20.321	64.304	1.00	31.21
ATOM	769	CA	TRP	79	38.757	21.740	64.337	1.00	30.80
ATOM	770	CB	TRP	79	40.177	21.943	64.845	1.00	39.07
ATOM	771	CG	TRP	79	40.626	23.313	65.164	1.00	36.64
ATOM	772	CD2	TRP	79	41.691	24.001	64.433	1.00	28.52
ATOM	773	CE2	TRP	79	41.826	25.288	65.002	1.00	36.49
ATOM	774	CE3	TRP	79	42.473	23.625	63.370	1.00	37.96
ATOM	775	CD1	TRP	79	40.199	24.235	66.113	1.00	29.59
ATOM	776	HE1	TRP	79	40.917	25.413	66.054	1.00	27.67
ATOM	778	CE2	TRP	79	42.770	26.213	64.543	1.00	31.83
ATOM	779	CE3	TRP						



Case	Age	Sex	Duration of illness	Onset	Course	Outcome
1	45	M	10 years	1975	Progressive	Death
2	55	F	15 years	1965	Progressive	Death
3	65	M	20 years	1955	Progressive	Death
4	75	F	25 years	1950	Progressive	Death
5	85	M	30 years	1945	Progressive	Death
6	95	F	35 years	1940	Progressive	Death
7	105	M	40 years	1935	Progressive	Death
8	115	F	45 years	1930	Progressive	Death
9	125	M	50 years	1925	Progressive	Death
10	135	F	55 years	1920	Progressive	Death
11	145	M	60 years	1915	Progressive	Death
12	155	F	65 years	1910	Progressive	Death
13	165	M	70 years	1905	Progressive	Death
14	175	F	75 years	1900	Progressive	Death
15	185	M	80 years	1895	Progressive	Death
16	195	F	85 years	1890	Progressive	Death
17	205	M	90 years	1885	Progressive	Death
18	215	F	95 years	1880	Progressive	Death
19	225	M	100 years	1875	Progressive	Death
20	235	F	105 years	1870	Progressive	Death
21	245	M	110 years	1865	Progressive	Death
22	255	F	115 years	1860	Progressive	Death
23	265	M	120 years	1855	Progressive	Death
24	275	F	125 years	1850	Progressive	Death
25	285	M	130 years	1845	Progressive	Death
26	295	F	135 years	1840	Progressive	Death
27	305	M	140 years	1835	Progressive	Death
28	315	F	145 years	1830	Progressive	Death
29	325	M	150 years	1825	Progressive	Death
30	335	F	155 years	1820	Progressive	Death
31	345	M	160 years	1815	Progressive	Death
32	355	F	165 years	1810	Progressive	Death
33	365	M	170 years	1805	Progressive	Death
34	375	F	175 years	1800	Progressive	Death
35	385	M	180 years	1795	Progressive	Death
36	395	F	185 years	1790	Progressive	Death
37	405	M	190 years	1785	Progressive	Death
38	415	F	195 years	1780	Progressive	Death
39	425	M	200 years	1775	Progressive	Death
40	435	F	205 years	1770	Progressive	Death
41	445	M	210 years	1765	Progressive	Death
42	455	F	215 years	1760	Progressive	Death
43	465	M	220 years	1755	Progressive	Death
44	475	F	225 years	1750	Progressive	Death
45	485	M	230 years	1745	Progressive	Death
46	495	F	235 years	1740	Progressive	Death
47	505	M	240 years	1735	Progressive	Death
48	515	F	245 years	1730	Progressive	Death
49	525	M	250 years	1725	Progressive	Death
50	535	F	255 years	1720	Progressive	Death
51	545	M	260 years	1715	Progressive	Death
52	555	F	265 years	1710	Progressive	Death
53	565	M	270 years	1705	Progressive	Death
54	575	F	275 years	1700	Progressive	Death
55	585	M	280 years	1695	Progressive	Death
56	595	F	285 years	1690	Progressive	Death
57	605	M	290 years	1685	Progressive	Death
58	615	F	295 years	1680	Progressive	Death
59	625	M	300 years	1675	Progressive	Death
60	635	F	305 years	1670	Progressive	Death
61	645	M	310 years	1665	Progressive	Death
62	655	F	315 years	1660	Progressive	Death
63	665	M				

ATOH	922	CE1	TYR	83	34.027	20.480	50.556	0.91	20.00	AAAA	C
ATOH	923	CE2	TYR	83	32.679	22.496	50.521	0.91	20.00	AAAA	C
ATOH	924	CH	TYR	83	33.740	21.737	50.012	0.91	20.00	AAAA	C
ATOH	925	OH	TYR	83	34.492	22.222	48.989	0.91	20.00	AAAA	O
ATOH	926	H	ASH	84	31.043	20.461	56.924	1.00	40.91	AAAA	H
ATOH	927	CA	ASH	84	30.250	20.057	58.056	1.00	35.54	AAAA	C
ATOH	928	CB	ASH	84	28.763	20.046	57.700	1.00	47.84	AAAA	C
ATOH	929	CG	ASH	84	28.274	21.164	56.797	1.00	60.75	AAAA	C
ATOH	930	OD1	ASH	84	26.319	22.343	57.119	1.00	45.55	AAAA	O
ATOH	931	HD2	ASH	84	27.839	20.876	55.552	1.00	65.98	AAAA	H
ATOH	932	O	ASH	84	30.686	18.679	58.556	1.00	36.33	AAAA	C
ATOH	933	O	ASH	84	30.137	18.206	59.500	1.00	38.24	AAAA	O
ATOH	934	H	TYR	85	31.455	17.900	57.800	1.00	32.78	AAAA	H
ATOH	936	CA	TYR	85	31.617	16.504	58.222	1.00	35.45	AAAA	C
ATOH	937	CB	TYR	95	31.473	15.579	57.000	1.00	35.54	AAAA	C
ATOH	938	CG	TYR	85	30.078	15.733	56.453	1.00	41.35	AAAA	C
ATOH	939	CD1	TYR	85	29.968	16.291	55.199	1.00	38.22	AAAA	C
ATOH	940	CE1	TYR	85	29.611	16.445	54.704	1.00	40.83	AAAA	C
ATOH	941	CD2	TYR	95	28.954	15.371	57.200	1.00	47.42	AAAA	C
ATOH	942	CE2	TYR	95	27.661	15.533	56.705	1.00	45.91	AAAA	C
ATOH	943	CG	TYR	95	27.497	16.072	55.445	1.00	46.06	AAAA	C
ATOH	944	OH	TYR	85	26.258	16.315	54.886	1.00	46.05	AAAA	O
ATOH	946	C	TYR	85	32.977	16.367	58.891	1.00	32.08	AAAA	C
ATOH	947	O	TYR	95	33.943	16.977	58.495	1.00	37.44	AAAA	O
ATOH	948	H	ALA	86	33.027	15.691	59.979	1.00	30.21	AAAA	H
ATOH	950	CA	ALA	86	34.257	15.325	60.670	1.00	34.10	AAAA	C
ATOH	951	CB	ALA	96	33.999	15.370	62.157	1.00	25.48	AAAA	C
ATOH	952	C	ALA	86	34.729	13.962	60.216	1.00	32.67	AAAA	C
ATOH	953	O	ALA	76	35.795	13.481	60.577	1.00	35.10	AAAA	O
ATOH	954	H	LEU	87	33.832	13.173	59.597	1.00	28.56	AAAA	H
ATOH	956	CA	LEU	87	34.188	11.805	59.323	1.00	20.26	AAAA	C
ATOH	957	CB	LEU	87	33.798	10.860	60.471	1.00	13.64	AAAA	C
ATOH	958	CG	LEU	87	33.801	9.363	60.188	1.00	25.77	AAAA	C
ATOH	959	CD1	LEU	87	35.140	8.915	59.571	1.00	27.21	AAAA	C
ATOH	960	CD2	LEU	87	33.637	8.432	61.393	1.00	23.52	AAAA	C
ATOH	961	C	LEU	87	33.530	11.429	58.021	1.00	35.60	AAAA	C
ATOH	962	O	LEU	87	32.320	11.421	58.001	1.00	38.97	AAAA	O
ATOH	963	H	VAL	88	34.174	11.300	56.875	1.00	37.86	AAAA	H
ATOH	965	CA	VAL	88	33.438	11.032	55.628	1.00	33.32	AAAA	C
ATOH	966	CB	VAL	88	33.666	12.085	54.553	1.00	22.38	AAAA	C
ATOH	967	CG1	VAL	88	32.974	11.675	53.261	1.00	19.24	AAAA	C
ATOH	968	CG2	VAL	88	33.165	13.402	55.042	1.00	13.27	AAAA	C
ATOH	969	C	VAL	88	33.898	9.684	55.114	1.00	31.79	AAAA	C
ATOH	970	O	VAL	88	35.069	9.407	55.117	1.00	33.57	AAAA	O
ATOH	971	H	ILE	89	33.078	8.728	54.822	1.00	31.08	AAAA	H
ATOH	973	CA	ILE	89	33.361	7.433	54.280	1.00	30.45	AAAA	C
ATOH	974	CB	ILE	89	32.941	6.384	55.296	1.00	30.17	AAAA	C
ATOH	975	CG2	ILE	89	32.898	4.954	54.821	1.00	37.24	AAAA	C
ATOH	976	CG1	ILE	89	33.893	6.420	56.500	1.00	24.92	AAAA	C
ATOH	977	CD1	ILE	89	33.424	5.613	57.675	1.00	23.96	AAAA	C
ATOH	978	C	ILE	89	32.509	7.206	53.027	1.00	40.64	AAAA	C
ATOH	979	O	ILE	89	31.330	6.881	53.205	1.00	38.69	AAAA	O
ATOH	980	H	PHE	90	33.082	7.464	51.845	1.00	41.45	AAAA	H
ATOH	982	CA	PHE	90	32.346	7.371	50.531	1.00	37.67	AAAA	C
ATOH	983	CB	PHE	90	32.347	8.776	50.110	1.00	32.17	AAAA	C
ATOH	984	CG	PHE	90	31.581	9.081	48.865	1.00	39.77	AAAA	C
ATOH	985	CD1	PHE	90	30.387	9.772	49.025	1.00	32.02	AAAA	C
ATOH	986	CD2	PHE	90	32.052	8.721	47.620	1.00	29.29	AAAA	C
ATOH	987	CE1	PHE	90	29.611	10.111	47.938	1.00	33.30	AAAA	C
ATOH	988	CE2	PHE	90	31.290	9.086	46.534	1.00	43.09	AAAA	C
ATOH	989	CG	PHE	90	30.083	9.764	46.697	1.00	50.24	AAAA	C
ATOH	990	C	PHE	90	32.856	6.384	49.557	1.00	40.72	AAAA	C
ATOH	991	O	PHE	90	34.027	6.296	49.203	1.00	46.15	AAAA	O
ATOH	992	H	GLU	91	32.024	5.519	49.001	1.00	39.16	AAAA	H
ATOH	994	CA	GLU	91	32.248	4.601	47.954	1.00	42.45	AAAA	C
ATOH	995	CB	GLU	91	32.479	5.231	46.583	1.00	38.08	AAAA	C
ATOH	996	CG	GLU	91	31.136	5.865	46.250	1.00	58.86	AAAA	C
ATOH	997	CD	GLU	91	30.855	5.776	44.757	1.00	63.55	AAAA	C
ATOH	998	OE1	GLU	91	31.473	6.651	44.082	1.00	64.10	AAAA	O
ATOH	999	OE2	GLU	91	30.058	4.813	44.573	1.00	63.64	AAAA	O
ATOH	900	C	GLU	91	33.422	3.734	48.313	1.00	42.06	AAAA	C
ATOH	901	O	GLU	91	34.299	3.411	47.587	1.00	44.71	AAAA	O
ATOH	902	H	HET	92	33.352	3.209	49.482	1.00	46.52	AAAA	H
ATOH	904	CA	HET	92	34.409	2.401	50.088	1.00	42.26	AAAA	C
ATOH	905	CB	HET	92	34.299	2.659	51.584	1.00	38.37	AAAA	C
ATOH	906	CG	HET	92	35.412	2.156	52.420	1.00	59.29	AAAA	C
ATOH	907	SD	HET	92	36.802	3.306	52.401	1.00	57.67	AAAA	S
ATOH	908	CE	HET	92	36.340	4.405	51.109	1.00	38.36	AAAA	C
ATOH	909	C	HET	92	34.012	1.005	49.745	1.00	43.37	AAAA	C
ATOH	910	O	HET	92	33.335	0.298	50.523	1.00	45.58	AAAA	O
ATOH	911	H	THR	93	34.449	0.518	48.602	1.00	47.09	AAAA	H
ATOH	913	CA	THR	93	34.175	-0.900	48.273	1.00	47.32	AAAA	C
ATOH	914	CB	THR	93	34.666	-1.281	46.868	1.00	55.29	AAAA	C
ATOH	915	CG1	THR	93	34.013	-0.488	45.892	1.00	57.81	AAAA	O
ATOH	917	CG2	THR	93	34.322	-2.715	46.512	1.00	44.71	AAAA	C

10/58

ATOH	918	C	THR	93	34.885	-1.874	49.196	1.00	51.83	AAAA	C
ATOH	919	O	THR	93	36.115	-1.777	49.361	1.00	57.91	AAAA	O
ATOH	920	H	ASH	94	34.237	-2.983	49.493	1.00	49.85	AAAA	H
ATOH	922	CA	ASH	94	34.747	-4.069	50.285	1.00	45.64	AAAA	C
ATOH	923	CB	ASH	94	36.241	-4.315	50.001	1.00	59.01	AAAA	C
ATOH	924	CG	ASH	94	36.494	-4.849	48.599	1.00	75.44	AAAA	C
ATOH	925	OD1	ASH	94	36.847	-4.081	47.688	1.00	77.49	AAAA	O
ATOH	926	HD2	ASH	94	36.308	-6.153	48.408	1.00	79.63	AAAA	H
ATOH	929	C	ASH	94	34.522	-3.838	51.763	1.00	42.58	AAAA	C
ATOH	930	O	ASH	94	34.752	-4.814	52.501	1.00	46.36	AAAA	O
ATOH	931	H	LEU	95	34.308	-2.609	52.132	1.00	37.29	AAAA	H
ATOH	933	CA	LEU	95	34.324	-2.277	53.621	1.00	39.96	AAAA	C
ATOH	934	CB	LEU	95	34.195	-0.786	53.851	1.00	34.05	AAAA	C
ATOH	935	CG	LEU	95	34.323	-0.296	55.269	1.00	35.91	AAAA	C
ATOH	936	CD1	LEU	95	35.785	-0.537	55.598	1.00	35.48	AAAA	C
ATOH	937	CD2	LEU	95	33.847	1.177	55.344	1.00	25.46	AAAA	C
ATOH	938	C	LEU	95	33.163	-2.996	54.275	1.00	43.75	AAAA	C
ATOH	939	O	LEU	95	32.048	-2.936	53.772	1.00	44.04	AAAA	O
ATOH	940	H	LYS	96	33.451	-3.863	55.213	1.00	46.50	AAAA	H
ATOH	942	CA	LYS	96	32.364	-4.648	55.779	1.00	42.76	AAAA	C
ATOH	943	CB	LYS	96	32.801	-6.075	55.995	1.00	41.41	AAAA	C
ATOH	944	CG	LYS	96	32.760	-6.976	54.788	1.00	49.78	AAAA	C
ATOH	945	CD	LYS	96	32.984	-8.446	55.127	1.00	58.09	AAAA	C
ATOH	946	CE	LYS	96	33.772	-9.160	54.027	1.00	73.43	AAAA	C
ATOH	947	HD	LYS	96	34.098	-10.556	54.489	1.00	79.13	AAAA	H
ATOH	951	C	LYS	96	31.970	-4.055	57.122	1.00	45.29	AAAA	C
ATOH	952	O	LYS	96	30.978	-4.502	57.691	1.00	46.23	AAAA	O
ATOH	953	H	ASP	97	32.685	-3.071	57.645	1.00	45.15	AAAA	H
ATOH	955	CA	ASP	97	32.299	-2.384	58.861	1.00	42.15	AAAA	C
ATOH	956	CB	ASP	97	32.294	-3.292	60.059	1.00	45.39	AAAA	C
ATOH	957	CG	ASP	97	33.662	-3.562	60.624	1.00	56.95	AAAA	C
ATOH	958	OD1	ASP	97	34.579	-2.825	61.012	1.00	59.88	AAAA	O
ATOH	959	OD2	ASP	97	33.931	-4.782	60.714	1.00	56.01	AAAA	O
ATOH	960	C	ASP	97	33.209	-1.224	59.201	1.00	41.25	AAAA	C
ATOH	961	O	ASP	97	34.160	-1.074	58.437	1.00	47.03	AAAA	O
ATOH	962	H	ILE	98	32.822	-0.366	60.129	1.00	40.41	AAAA	H
ATOH	964	CA	ILE	98	33.675	0.820	60.340	1.00	37.83	AAAA	C
ATOH	965	CB	ILE	98	32.983	2.006	61.006	1.00	38.99	AAAA	C
ATOH	966	CG2	ILE	98	34.007	3.133	61.207	1.00	38.95	AAAA	C
ATOH	967	CG1	ILE	98	31.835	2.488	60.092	1.00	34.84	AAAA	C
ATOH	968	CD1	ILE	98	31.629	3.958	59.948	1.00	39.29	AAAA	C
ATOH	969	C	ILE	98	34.854	0.322	61.114	1.00	35.11	AAAA	C
ATOH	970	O	ILE	98	35.970	0.669	60.841	1.00	43.05	AAAA	O
ATOH	971	H	GLY	99	34.618	-0.393	62.192	1.00	34.22	AAAA	H
ATOH	973	CA	GLY	99	35.477	-0.972	63.121	1.00	33.74	AAAA	C
ATOH	974	C	GLY	99	36.279	-0.084	64.024	1.00	35.90	AAAA	C
ATOH	975	O	GLY	99	37.023	-0.572	64.899	1.00	38.21	AAAA	O
ATOH	976	H	LEU	100	36.190	1.221	63.913	1.00	33.35	AAAA	H
ATOH	978	CA	LEU	100	36.763	2.215	64.771	1.00	31.65	AAAA	C
ATOH	979	CB	LEU	100	36.496	3.636	64.294	1.00	29.87	AAAA	C
ATOH	980	CG	LEU	100	36.943	3.980	62.835	1.00	32.13	AAAA	C
ATOH	981	CD1	LEU	100	36.710	5.479	62.610	1.00	21.32	AAAA	C
ATOH	982	CD2	LEU	100	38.412	3.599	62.644	1.00	37.62	AAAA	C
ATOH	983	C	LEU	100	36.312	1.976	66.194	1.00	31.94	AAAA	C
ATOH	984	O	LEU	100	35.950	2.863	66.979	1.00	31.95	AAAA	O
ATOH	985	H	THR	101	36.704	0.851	66.779	1.00	31.87	AAAA	H
ATOH	987	CA	THR	101	36.329	0.395	68.071	1.00	33.33	AAAA	C
ATOH	988	CB	THR	101	36.491	-1.104	68.264	1.00	41.03	AAAA	C
ATOH	989	CG	THR	101	37.919	-1.559	68.369	1.00	46.66	AAAA	C
ATOH	990	CD1	THR	101	38.571	-1.380	69.587	1.00	51.20	AAAA	C
ATOH	991	CE1	THR	101	39.901	-1.743	69.749	1.00	49.44	AAAA	C
ATOH	992	CD2	THR	101	38.615	-2.112	67.322	1.00	45.15	AAAA	C
ATOH	993	CE2	THR	101	39.927	-2.505	67.479	1.00	47.09	AAAA	C
ATOH	994	CC	THR	101	40.549	-2.321	68.688	1.00	49.43	AAAA	C
ATOH	995	OH	THR	101	41.834	-2.662	68.997	1.00	55.82	AAAA	O
ATOH	997	C	THR	101	36.989	1.059	69.214	1.00	33.46	AAAA	C
ATOH	998	O	THR	101	36.630	0.813	70.375	1.00	43.06	AAAA	O
ATOH	999	H	ASH	102	37.752	2.091	69.068	1.00	38.12	AAAA	H
ATOH	1001	CA	ASH	102	38.093	2.979	70.223	1.00	30.79	AAAA	C
ATOH	1002	CB	ASH	102	39.603	2.911	70.363	1.00	48.63	AAAA	C
ATOH	1003	CG	ASH	102	40.112	1.804	71.268	1.00	54.01	AAAA	C
ATOH	1004	OD1	ASH	102	39.736	1.864	72.454	1.00	47.22	AAAA	O
ATOH	1005	HD2	ASH	102	40.864	0.845	70.767	1.00	43.08	AAAA	H
ATOH	1008	C	ASH	102	37.673	4.385	69.947	1.00	33.82	AAAA	C
ATOH	1009	O	ASH	102	38.047	5.364	70.592	1.00	39.84	AAAA	O
ATOH	1010	H	LEU	103	36.845	4.640	68.982	1.00	35.28	AAAA	H
ATOH	1012	CA	LEU	103	36.473	6.040	68.621	1.00	36.57	AAAA	C
ATOH	1013	CB	LEU	103	35.948	6.140	67.213	1.00	34.77	AAAA	C
ATOH	1014	CG	LEU	103	35.525	7.482	66.612	1.00	30.32	AAAA	C
ATOH	1015	CD1	LEU	103	36.606	8.513	66.646	1.00	23.20	AAAA	C
ATOH	1016	CD2	LEU	103	35.199	7.169	65.146	1.00	37.10	AAAA	C
ATOH	1017	C	LEU	103	35.484	6.508	69.691	1.00	37.31	AAAA	C
ATOH	1018	O	LEU	103	34.449	5.874	69.837	1.00	34.24	AAAA	O
ATOH	1019	H	ARG	104	35.810	7.456	70.563	1.00	33.31	AAAA	H
ATOH	1021	CA	ARG	104	34.920	7.041	71.605	1.00	29.66	AAAA	C

0955275 WO 99/28347

09/555275

ATOM	1022	CB	ARG	104	35.568	7.657	73.019	1.00	38.17	AAAA	C
ATOM	1023	CG	ARG	104	36.356	5.375	73.165	1.00	48.37	AAAA	C
ATOM	1024	CD	ARG	104	35.425	5.193	73.248	1.00	50.71	AAAA	C
ATOM	1025	HE	ARG	104	34.582	5.320	74.413	1.00	52.38	AAAA	H
ATOM	1027	CG	ARG	104	34.900	4.847	75.621	1.00	72.73	AAAA	C
ATOM	1029	NH1	ARG	104	36.047	4.214	75.900	1.00	81.87	AAAA	H
ATOM	1031	NH2	ARG	104	33.990	5.070	76.577	1.00	78.27	AAAA	H
ATOM	1034	C	ARG	104	34.466	9.273	71.540	1.00	32.58	AAAA	C
ATOM	1035	O	ARG	104	33.553	9.743	72.223	1.00	39.89	AAAA	O
ATOM	1036	H	ASH	105	34.992	10.065	70.637	1.00	33.47	AAAA	H
ATOM	1038	CA	ASH	105	34.549	11.450	70.599	1.00	30.97	AAAA	C
ATOM	1044	C	ASH	105	34.907	12.149	69.310	1.00	31.00	AAAA	C
ATOM	1045	O	ASH	105	36.086	12.067	69.050	1.00	37.79	AAAA	O
ATOM	1039	CG	ASH	105	35.203	12.199	71.721	1.00	12.28	AAAA	C
ATOM	1040	CB	ASH	105	34.786	13.568	71.756	1.00	24.93	AAAA	C
ATOM	1041	OD1	ASH	105	35.125	14.549	71.127	1.00	38.14	AAAA	O
ATOM	1042	HD2	ASH	105	33.828	13.985	72.649	1.00	35.96	AAAA	H
ATOM	1046	H	ILE	106	33.969	12.669	69.576	1.00	31.90	AAAA	H
ATOM	1048	CA	ILE	106	34.129	13.551	67.469	1.00	23.39	AAAA	C
ATOM	1049	CB	ILE	106	33.239	13.185	68.307	1.00	16.54	AAAA	C
ATOM	1050	CG2	ILE	106	33.132	14.408	65.374	1.00	20.38	AAAA	C
ATOM	1051	CG1	ILE	106	33.928	12.034	65.558	1.00	18.30	AAAA	C
ATOM	1052	CD1	ILE	106	33.055	11.293	64.643	1.00	25.48	AAAA	C
ATOM	1053	C	ILE	106	33.803	14.909	68.009	1.00	27.40	AAAA	C
ATOM	1054	O	ILE	106	32.628	15.106	68.243	1.00	32.86	AAAA	O
ATOM	1055	H	THR	107	34.719	15.789	68.350	1.00	30.43	AAAA	H
ATOM	1057	CA	THR	107	34.532	16.983	69.145	1.00	28.27	AAAA	C
ATOM	1058	CB	THR	107	35.902	17.607	69.579	1.00	35.78	AAAA	C
ATOM	1059	OG1	THR	107	36.819	16.503	69.739	1.00	40.26	AAAA	O
ATOM	1061	CG2	THR	107	35.954	18.411	70.855	1.00	28.13	AAAA	C
ATOM	1062	C	THR	107	33.728	17.950	69.332	1.00	27.95	AAAA	C
ATOM	1063	O	THR	107	33.392	19.060	68.831	1.00	32.99	AAAA	O
ATOM	1064	H	ARG	108	33.669	17.777	67.019	1.00	30.28	AAAA	H
ATOM	1066	CA	ARG	108	33.046	18.809	66.180	1.00	31.25	AAAA	C
ATOM	1067	CB	ARG	108	33.965	20.011	65.951	1.00	25.13	AAAA	C
ATOM	1068	CG	ARG	108	33.105	21.174	65.543	1.00	30.68	AAAA	C
ATOM	1069	CD	ARG	108	33.917	22.444	65.529	1.00	17.12	AAAA	C
ATOM	1070	HE	ARG	108	33.511	23.376	64.451	1.00	33.40	AAAA	H
ATOM	1072	CZ	ARG	108	34.045	23.608	63.266	1.00	46.41	AAAA	C
ATOM	1073	NH1	ARG	108	35.162	22.929	62.868	1.00	40.30	AAAA	H
ATOM	1076	NH2	ARG	108	33.454	24.543	62.494	1.00	39.82	AAAA	H
ATOM	1079	C	ARG	108	32.701	18.328	64.784	1.00	31.50	AAAA	C
ATOM	1080	O	ARG	108	33.379	17.381	64.430	1.00	32.67	AAAA	O
ATOM	1081	H	GLY	109	31.567	18.809	64.284	1.00	32.60	AAAA	H
ATOM	1083	CA	GLY	109	31.082	18.385	62.993	1.00	28.87	AAAA	C
ATOM	1084	C	GLY	109	30.470	17.008	63.001	1.00	32.32	AAAA	C
ATOM	1085	O	GLY	109	30.471	16.306	64.006	1.00	38.03	AAAA	O
ATOM	1086	H	ALA	110	29.920	16.560	61.894	1.00	34.11	AAAA	H
ATOM	1088	CA	ALA	110	29.086	15.371	61.833	1.00	36.77	AAAA	C
ATOM	1089	CB	ALA	110	27.708	15.721	61.223	1.00	15.32	AAAA	C
ATOM	1090	C	ALA	110	29.745	14.335	60.957	1.00	32.12	AAAA	C
ATOM	1091	O	ALA	110	30.921	14.332	60.687	1.00	34.11	AAAA	O
ATOM	1092	H	ILE	111	29.030	13.337	60.557	1.00	26.55	AAAA	H
ATOM	1094	CA	ILE	111	29.569	12.273	59.771	1.00	32.90	AAAA	C
ATOM	1095	CB	ILE	111	29.669	10.967	60.591	1.00	38.07	AAAA	C
ATOM	1096	CG2	ILE	111	30.091	11.140	62.036	1.00	34.05	AAAA	C
ATOM	1097	CG1	ILE	111	28.345	10.237	60.684	1.00	26.54	AAAA	C
ATOM	1098	CD1	ILE	111	28.437	8.872	61.407	1.00	27.11	AAAA	C
ATOM	1099	C	ILE	111	28.738	11.928	58.521	1.00	33.98	AAAA	C
ATOM	1100	O	ILE	111	27.533	12.179	59.532	1.00	32.15	AAAA	O
ATOM	1101	H	ARG	112	29.432	11.423	57.501	1.00	30.54	AAAA	H
ATOM	1103	CA	ARG	112	28.773	11.107	56.247	1.00	27.48	AAAA	C
ATOM	1104	CB	ARG	112	29.186	12.085	55.169	1.00	26.35	AAAA	C
ATOM	1105	CG	ARG	112	29.548	11.653	53.816	1.00	25.83	AAAA	C
ATOM	1106	CD	ARG	112	28.659	12.912	52.992	1.00	32.92	AAAA	C
ATOM	1107	HE	ARG	112	27.950	12.726	51.770	1.00	50.34	AAAA	H
ATOM	1109	CZ	ARG	112	27.778	13.503	50.720	1.00	47.61	AAAA	C
ATOM	1110	NH1	ARG	112	28.334	14.695	50.696	1.00	44.92	AAAA	H
ATOM	1113	NH2	ARG	112	27.012	12.925	49.789	1.00	46.00	AAAA	H
ATOM	1116	C	ARG	112	29.260	9.738	55.791	1.00	29.74	AAAA	C
ATOM	1117	O	ARG	112	30.343	9.611	55.406	1.00	36.52	AAAA	O
ATOM	1118	H	ILE	113	28.326	8.754	55.886	1.00	33.99	AAAA	H
ATOM	1120	CA	ILE	113	28.612	7.376	55.555	1.00	36.26	AAAA	C
ATOM	1121	CB	ILE	113	28.457	6.461	56.760	1.00	33.27	AAAA	C
ATOM	1122	CG2	ILE	113	28.850	5.021	56.449	1.00	15.85	AAAA	C
ATOM	1123	CG1	ILE	113	29.374	7.012	57.874	1.00	31.92	AAAA	C
ATOM	1124	CD1	ILE	113	29.324	6.250	59.176	1.00	42.34	AAAA	C
ATOM	1125	C	ILE	113	27.729	6.959	54.398	1.00	39.26	AAAA	C
ATOM	1126	O	ILE	113	26.637	6.482	54.664	1.00	50.72	AAAA	O
ATOM	1127	H	GLU	114	28.175	7.199	53.190	1.00	35.86	AAAA	H
ATOM	1129	CA	GLU	114	27.491	7.103	51.935	1.00	38.76	AAAA	C
ATOM	1130	CB	GLU	114	27.471	8.443	51.216	1.00	25.58	AAAA	C
ATOM	1131	CG	GLU	114	26.567	8.402	49.969	1.00	27.97	AAAA	C
ATOM	1132	CD	GLU	114	26.349	9.810	49.579	1.00	36.85	AAAA	C
ATOM	1133	OE1	GLU	114	26.763	10.652	50.414	1.00	45.57	AAAA	O

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12/58

ATOM	1134	OE2	GLU	114	25.787	10.106	49.489	1.00	35.53	AAAA	O
ATOM	1135	C	GLU	114	28.039	6.072	50.944	1.00	44.17	AAAA	C
ATOM	1136	O	GLU	114	29.120	5.538	51.090	1.00	49.97	AAAA	O
ATOM	1137	H	LYS	115	27.191	5.556	50.096	1.00	40.55	AAAA	H
ATOM	1139	CA	LYS	115	27.219	4.440	49.242	1.00	41.16	AAAA	C
ATOM	1140	CB	LYS	115	27.275	4.764	47.719	1.00	23.62	AAAA	C
ATOM	1141	CG	LYS	115	27.019	6.194	47.411	1.00	18.39	AAAA	C
ATOM	1142	CD	LYS	115	26.537	6.355	45.982	1.00	24.74	AAAA	C
ATOM	1143	CE	LYS	115	26.751	7.804	46.622	1.00	41.86	AAAA	C
ATOM	1144	NE	LYS	115	27.165	8.045	44.196	1.00	60.91	AAAA	H
ATOM	1148	C	LYS	115	28.297	3.421	49.611	1.00	42.39	AAAA	C
ATOM	1149	O	LYS	115	29.102	3.103	48.740	1.00	46.68	AAAA	O
ATOM	1150	H	ASN	116	28.137	2.677	50.665	1.00	40.99	AAAA	H
ATOM	1152	CA	ASN	116	29.022	1.570	50.976	1.00	37.33	AAAA	C
ATOM	1153	CB	ASN	116	29.534	1.869	52.301	1.00	46.12	AAAA	C
ATOM	1154	CG	ASN	116	30.372	3.153	52.315	1.00	49.92	AAAA	C
ATOM	1155	OD1	ASN	116	31.337	3.016	51.503	1.00	38.59	AAAA	O
ATOM	1156	ND2	ASN	116	29.927	4.174	53.056	1.00	37.35	AAAA	H
ATOM	1159	C	ASN	116	28.275	0.277	50.974	1.00	42.52	AAAA	C
ATOM	1160	O	ASN	116	28.067	-0.361	52.033	1.00	48.24	AAAA	O
ATOM	1161	H	ALA	117	27.989	-0.188	49.772	1.00	40.94	AAAA	H
ATOM	1163	CA	ALA	117	27.195	-1.376	49.542	1.00	43.35	AAAA	C
ATOM	1164	CB	ALA	117	27.494	-1.894	48.156	1.00	47.63	AAAA	C
ATOM	1165	C	ALA	117	27.294	-2.504	50.529	1.00	46.55	AAAA	C
ATOM	1166	O	ALA	117	26.211	-2.998	50.890	1.00	51.24	AAAA	O
ATOM	1167	H	ASP	118	28.484	-2.823	51.005	1.00	47.43	AAAA	H
ATOM	1169	CA	ASP	118	28.559	-3.980	51.920	1.00	45.74	AAAA	C
ATOM	1170	CB	ASP	118	29.659	-4.945	51.477	1.00	55.39	AAAA	C
ATOM	1171	CG	ASP	118	29.684	-5.119	49.958	1.00	59.40	AAAA	C
ATOM	1172	OD1	ASP	118	28.870	-5.976	49.608	1.00	64.40	AAAA	O
ATOM	1173	OD2	ASP	118	30.448	-4.447	49.207	1.00	66.73	AAAA	O
ATOM	1174	C	ASP	118	28.818	-3.586	53.353	1.00	37.29	AAAA	C
ATOM	1175	O	ASP	118	29.127	-4.536	54.026	1.00	42.89	AAAA	O
ATOM	1176	H	LEU	119	28.670	-2.327	53.685	1.00	36.46	AAAA	H
ATOM	1178	CA	LEU	119	28.986	-1.885	55.047	1.00	40.58	AAAA	C
ATOM	1179	CB	LEU	119	29.159	-0.389	55.145	1.00	34.31	AAAA	C
ATOM	1180	CG	LEU	119	29.640	0.331	56.378	1.00	36.58	AAAA	C
ATOM	1181	CD1	LEU	119	30.950	-0.101	56.948	1.00	35.77	AAAA	C
ATOM	1182	CD2	LEU	119	29.791	1.830	56.104	1.00	29.68	AAAA	C
ATOM	1183	C	LEU	119	27.927	-2.376	56.007	1.00	43.67	AAAA	C
ATOM	1184	O	LEU	119	26.748	-2.248	55.743	1.00	45.32	AAAA	O
ATOM	1185	H	CYS	120	28.361	-2.967	57.110	1.00	43.53	AAAA	H
ATOM	1187	CA	CYS	120	27.378	-3.407	58.089	1.00	38.93	AAAA	C
ATOM	1188	C	CYS	120	27.881	-2.921	59.426	1.00	41.91	AAAA	C
ATOM	1189	O	CYS	120	28.660	-1.960	59.446	1.00	43.66	AAAA	O
ATOM	1190	CB	CYS	120	27.285	-4.907	50.100	1.00	37.59	AAAA	C
ATOM	1191	SG	CYS	120	26.568	-5.622	56.639	1.00	58.32	AAAA	S
ATOM	1192	H	TYR	121	27.328	-3.456	60.509	1.00	38.05	AAAA	H
ATOM	1194	CA	TYR	121	27.795	-3.010	61.927	1.00	39.68	AAAA	C
ATOM	1195	CB	TYR	121	29.189	-3.572	62.130	1.00	34.61	AAAA	C
ATOM	1196	CG	TYR	121	28.950	-5.032	62.519	1.00	36.52	AAAA	C
ATOM	1197	CD1	TYR	121	29.087	-6.045	61.582	1.00	33.58	AAAA	C
ATOM	1198	CE1	TYR	121	29.852	-7.350	61.980	1.00	41.21	AAAA	C
ATOM	1199	CD2	TYR	121	28.560	-5.337	63.917	1.00	36.31	AAAA	C
ATOM	1200	CE2	TYR	121	28.297	-6.630	64.201	1.00	39.48	AAAA	C
ATOM	1201	CS	TYR	121	28.432	-7.641	63.270	1.00	46.07	AAAA	C
ATOM	1202	OH	TYR	121	28.161	-8.924	63.730	1.00	49.20	AAAA	O
ATOM	1204	C	TYR	121	27.674	-1.523	61.789	1.00	38.83	AAAA	C
ATOM	1205	O	TYR	121	28.445	-0.778	62.369	1.00	43.22	AAAA	O
ATOM	1206	H	LEU	122	26.587	-1.045	61.180	1.00	39.58	AAAA	H
ATOM	1208	CA	LEU	122	26.361	0.405	61.090	1.00	44.82	AAAA	C
ATOM	1209	CB	LEU	122	25.990	0.715	59.634	1.00	46.48	AAAA	C
ATOM	1210	CG	LEU	122	26.497	2.014	59.108	1.00	44.44	AAAA	C
ATOM	1211	CD1	LEU	122	25.778	2.448	57.859	1.00	32.19	AAAA	C
ATOM	1212	CD2	LEU	122	26.136	3.057	60.170	1.00	47.76	AAAA	C
ATOM	1213	C	LEU	122	25.212	0.910	61.935	1.00	44.85	AAAA	C
ATOM	1214	O	LEU	122	25.269	1.759	62.839	1.00	47.66	AAAA	O
ATOM	1215	H	SER	123	24.104	0.137	61.843	1.00	40.12	AAAA	H
ATOM	1217	CA	SER	123	22.949	0.435	62.703	1.00	33.98	AAAA	C
ATOM	1218	CB	SER	123	21.754	-0.330	62.239	1.00	19.26	AAAA	C
ATOM	1219	CG	SER	123	21.964	-1.762	62.402	1.00	34.35	AAAA	C
ATOM	1221	C	SER	123	23.165	0.060	64.159	1.00	37.43	AAAA	C
ATOM	1222	O	SER	123	22.326	0.280	65.025	1.00	35.33	AAAA	O
ATOM	1223	H	THR	124	24.242	-0.698	64.432	1.00	39.03	AAAA	H
ATOM	1225	CA	THR	124	24.554	-1.165	65.753	1.00	37.79	AAAA	C
ATOM	1226	CB	THR	124	25.368	-2.461	65.719	1.00	42.39	AAAA	C
ATOM	1227	CG1	THR	124	26.502	-2.020	64.924	1.00	47.70	AAAA	C
ATOM	1229	CG2	THR	124	24.677	-3.622	65.006	1.00	40.93	AAAA	C
ATOM	1230	C	THR	124	25.522	-0.206	66.445	1.00	39.29	AAAA	C
ATOM	1231	O	THR	124	25.948	-0.642	67.499	1.00	41.41	AAAA	O
ATOM	1232	H	VAL	125	25.737	1.001	65.995	1.00	37.80	AAAA	H
ATOM	1234	CA	VAL	125	26.594	1.964	66.661	1.00	41.06	AAAA	C
ATOM	1235	CB	VAL	125	27.683	2.542	65.711	1.00	39.50	AAAA	C
ATOM	1236	CG1	VAL	125	28.570	3.599	66.352	1.00	28.36	AAAA	C
ATOM	1237	CG2	VAL	125	28.693	1.565	65.110	1.00	33.07	AAAA	C

0055275 - 083001

09/555275

13/58

ATOH	1238	C	VAL	125	25.759	3.127	67.175	1.00	41.17	AAAA	C
ATOH	1239	O	VAL	125	24.941	3.750	66.531	1.00	41.22	AAAA	O
ATOH	1240	H	ASP	126	26.072	3.636	68.367	1.00	44.54	AAAA	H
ATOH	1242	CA	ASP	126	25.310	4.734	68.967	1.00	37.44	AAAA	C
ATOH	1243	CB	ASP	126	24.862	4.335	70.342	1.00	34.73	AAAA	C
ATOH	1244	CG	ASP	126	23.879	5.303	70.993	1.00	45.53	AAAA	C
ATOH	1245	OD1	ASP	126	23.699	6.520	70.685	1.00	27.71	AAAA	O
ATOH	1246	OD2	ASP	126	23.220	4.865	71.964	1.00	52.32	AAAA	O
ATOH	1247	C	ASF	126	26.146	5.985	68.872	1.00	40.83	AAAA	C
ATOH	1248	O	ASP	126	26.740	6.400	69.888	1.00	42.78	AAAA	O
ATOH	1249	H	TRP	127	26.029	6.649	67.704	1.00	35.42	AAAA	H
ATOH	1251	CA	TRP	127	26.777	7.856	67.410	1.00	33.02	AAAA	C
ATOH	1252	CB	TRP	127	26.568	9.296	66.930	1.00	24.89	AAAA	C
ATOH	1253	CG	TRP	127	27.195	7.372	64.907	1.00	34.36	AAAA	C
ATOH	1254	CD2	TRP	127	28.587	7.208	64.518	1.00	28.60	AAAA	C
ATOH	1255	CE2	TRP	127	28.631	6.186	63.579	1.00	22.06	AAAA	C
ATOH	1256	CE3	TRP	127	29.778	7.045	64.873	1.00	35.51	AAAA	C
ATOH	1257	CD1	TRP	127	26.465	6.450	64.188	1.00	18.67	AAAA	C
ATOH	1258	HE1	TRP	127	27.311	5.712	63.394	1.00	42.87	AAAA	H
ATOH	1260	CD2	TRP	127	29.792	5.783	62.954	1.00	32.53	AAAA	C
ATOH	1261	CD3	TRP	127	30.972	7.445	64.285	1.00	31.51	AAAA	C
ATOH	1262	CH2	TRP	127	30.937	6.405	63.336	1.00	37.86	AAAA	C
ATOH	1263	C	TRP	127	26.558	9.010	68.367	1.00	36.09	AAAA	C
ATOH	1264	O	TRP	127	27.382	9.977	68.497	1.00	40.87	AAAA	O
ATOH	1265	H	SER	128	25.493	8.931	69.171	1.00	31.24	AAAA	H
ATOH	1267	CA	SER	128	25.201	10.041	70.081	1.00	34.04	AAAA	C
ATOH	1268	CB	SER	128	23.757	10.042	70.603	1.00	36.87	AAAA	C
ATOH	1269	CG	SER	128	23.433	8.917	71.424	1.00	28.96	AAAA	O
ATOH	1271	C	SER	128	26.133	9.975	71.292	1.00	32.39	AAAA	C
ATOH	1272	O	SER	128	26.212	10.957	72.134	1.00	30.91	AAAA	O
ATOH	1273	H	LEU	129	26.662	8.792	71.549	1.00	27.18	AAAA	H
ATOH	1275	CA	LEU	129	27.701	8.607	72.526	1.00	36.73	AAAA	C
ATOH	1276	CB	LEU	129	27.920	7.132	72.741	1.00	32.53	AAAA	C
ATOH	1277	CG	LEU	129	26.795	6.324	73.371	1.00	39.28	AAAA	C
ATOH	1278	CD1	LEU	129	27.292	5.024	73.975	1.00	32.54	AAAA	C
ATOH	1279	CD2	LEU	129	26.237	7.117	74.560	1.00	32.12	AAAA	C
ATOH	1280	C	LEU	129	29.054	9.226	72.113	1.00	30.04	AAAA	C
ATOH	1281	O	LEU	129	29.645	10.001	72.874	1.00	34.50	AAAA	O
ATOH	1282	H	ILE	130	29.316	9.217	70.807	1.00	42.09	AAAA	H
ATOH	1284	CA	ILE	130	30.480	9.743	70.144	1.00	41.35	AAAA	C
ATOH	1285	CB	ILE	130	30.793	8.886	68.901	1.00	41.73	AAAA	C
ATOH	1286	CG2	ILE	130	31.992	9.434	68.176	1.00	31.95	AAAA	C
ATOH	1297	CG1	ILE	130	30.969	7.413	69.347	1.00	26.64	AAAA	C
ATOH	1288	CD1	ILE	130	31.053	6.457	68.165	1.00	42.65	AAAA	C
ATOH	1289	C	ILE	130	30.305	11.178	69.679	1.00	46.48	AAAA	C
ATOH	1290	O	ILE	130	31.224	11.985	69.966	1.00	38.46	AAAA	O
ATOH	1291	H	LEU	131	29.089	11.495	69.193	1.00	45.14	AAAA	H
ATOH	1293	CA	LEU	131	28.895	12.865	68.651	1.00	41.45	AAAA	C
ATOH	1294	CB	LEU	131	28.499	12.616	67.259	1.00	46.81	AAAA	C
ATOH	1295	CG	LEU	131	28.823	12.805	65.878	1.00	36.79	AAAA	C
ATOH	1296	CD1	LEU	131	29.128	11.405	65.324	1.00	30.15	AAAA	C
ATOH	1297	CD2	LEU	131	27.625	13.581	65.334	1.00	19.92	AAAA	C
ATOH	1298	C	LEU	131	27.661	13.525	69.285	1.00	39.28	AAAA	C
ATOH	1299	O	LEU	131	26.599	12.867	69.311	1.00	37.75	AAAA	O
ATOH	1300	H	ASP	132	27.742	14.811	69.518	1.00	33.73	AAAA	H
ATOH	1302	CA	ASP	132	26.610	15.542	70.003	1.00	38.20	AAAA	C
ATOH	1303	CB	ASP	132	27.017	16.944	70.381	1.00	43.17	AAAA	C
ATOH	1304	CG	ASP	132	27.349	17.137	71.834	1.00	43.29	AAAA	C
ATOH	1305	OD1	ASP	132	27.536	16.122	72.521	1.00	47.12	AAAA	O
ATOH	1306	OD2	ASP	132	27.413	18.331	72.208	1.00	60.58	AAAA	O
ATOH	1307	C	ASP	132	25.520	15.659	68.946	1.00	43.46	AAAA	C
ATOH	1308	O	ASP	132	24.481	15.032	68.939	1.00	49.32	AAAA	O
ATOH	1309	H	ALA	133	25.754	16.398	67.900	1.00	45.03	AAAA	H
ATOH	1311	CA	ALA	133	24.947	16.776	66.773	1.00	38.62	AAAA	C
ATOH	1312	CB	ALA	133	25.629	17.987	66.092	1.00	33.82	AAAA	C
ATOH	1313	C	ALA	133	24.694	15.669	65.775	1.00	33.33	AAAA	C
ATOH	1314	O	ALA	133	24.777	15.791	64.517	1.00	33.71	AAAA	O
ATOH	1315	H	VAL	134	24.115	14.565	66.219	1.00	27.88	AAAA	H
ATOH	1317	CA	VAL	134	23.813	13.440	65.377	1.00	29.90	AAAA	C
ATOH	1318	CB	VAL	134	23.202	12.241	66.120	1.00	40.63	AAAA	C
ATOH	1319	CG1	VAL	134	24.265	11.441	66.856	1.00	35.26	AAAA	C
ATOH	1320	CG2	VAL	134	22.095	12.701	67.068	1.00	30.84	AAAA	C
ATOH	1321	C	VAL	134	22.735	13.732	64.353	1.00	36.98	AAAA	C
ATOH	1322	O	VAL	134	22.616	13.106	63.292	1.00	32.95	AAAA	O
ATOH	1323	H	SER	135	21.920	14.777	64.626	1.00	39.65	AAAA	H
ATOH	1325	CA	SER	135	20.886	15.139	63.692	1.00	43.12	AAAA	C
ATOH	1326	CB	SER	135	20.093	16.277	64.305	1.00	45.19	AAAA	C
ATOH	1327	CG	SER	135	20.882	17.369	64.684	1.00	39.25	AAAA	O
ATOH	1329	C	SER	135	21.396	15.516	62.309	1.00	41.15	AAAA	C
ATOH	1330	O	SER	135	20.515	15.642	61.359	1.00	43.81	AAAA	O
ATOH	1331	H	ASH	136	22.615	15.911	62.165	1.00	41.11	AAAA	H
ATOH	1333	CA	ASH	136	23.298	16.353	60.978	1.00	37.21	AAAA	C
ATOH	1334	CB	ASH	136	24.324	17.372	61.399	1.00	39.66	AAAA	C
ATOH	1335	CG	ASH	136	23.724	19.709	61.717	1.00	36.58	AAAA	C
ATOH	1336	OD1	ASH	136	22.695	19.079	61.149	1.00	50.81	AAAA	O

005533-03001

14/58

ATOH	1337	HD2	ASH	136	24.379	19.441	62.585	1.00	47.85	AAAA	H
ATOH	1340	C	ASH	136	21.931	15.230	60.259	1.00	35.31	AAAA	C
ATOH	1341	O	ASH	136	24.535	15.484	59.124	1.00	38.70	AAAA	O
ATOH	1342	H	ASH	137	24.057	14.035	60.723	1.00	29.11	AAAA	H
ATOH	1344	CA	ASH	137	24.721	12.959	60.126	1.00	32.98	AAAA	C
ATOH	1345	CB	ASH	137	24.737	11.703	61.033	1.00	24.45	AAAA	C
ATOH	1346	CG	ASH	137	25.631	11.965	62.217	1.00	26.63	AAAA	C
ATOH	1347	OD1	ASH	137	26.070	13.121	62.369	1.00	30.22	AAAA	O
ATOH	1348	HD2	ASH	137	25.930	10.923	63.000	1.00	19.90	AAAA	H
ATOH	1351	C	ASH	137	23.959	12.749	58.817	1.00	35.89	AAAA	C
ATOH	1352	O	ASH	137	22.716	12.755	58.855	1.00	38.57	AAAA	O
ATOH	1353	H	TYR	138	24.592	12.251	57.785	1.00	32.86	AAAA	H
ATOH	1355	CA	TYR	138	24.993	11.983	56.489	1.00	30.25	AAAA	C
ATOH	1356	CB	TYR	138	24.682	12.861	55.421	1.00	27.10	AAAA	C
ATOH	1357	CG	TYR	138	24.018	12.741	54.079	1.00	37.89	AAAA	C
ATOH	1358	CD1	TYR	138	23.093	13.671	53.649	1.00	39.22	AAAA	C
ATOH	1359	CE1	TYR	138	22.510	13.579	52.392	1.00	37.65	AAAA	C
ATOH	1360	CE2	TYR	138	24.357	11.717	53.195	1.00	44.29	AAAA	C
ATOH	1361	CE2	TYR	138	23.601	11.615	51.951	1.00	41.97	AAAA	C
ATOH	1362	CG	TYR	138	22.868	12.562	51.564	1.00	39.42	AAAA	C
ATOH	1363	OH	TYR	138	22.296	12.504	50.318	1.00	45.48	AAAA	O
ATOH	1365	C	TYR	138	24.373	10.579	56.051	1.00	31.33	AAAA	C
ATOH	1366	O	TYR	138	25.505	10.317	55.797	1.00	37.76	AAAA	O
ATOH	1367	H	ILE	139	23.461	9.660	56.116	1.00	35.40	AAAA	H
ATOH	1369	CA	ILE	139	23.637	8.249	55.935	1.00	34.04	AAAA	C
ATOH	1370	CB	ILE	139	23.234	7.450	57.171	1.00	28.66	AAAA	C
ATOH	1371	CG2	ILE	139	23.640	5.904	57.093	1.00	21.99	AAAA	C
ATOH	1372	CG1	ILE	139	23.711	8.057	58.469	1.00	42.81	AAAA	C
ATOH	1373	CD1	ILE	139	24.455	7.100	59.389	1.00	52.23	AAAA	C
ATOH	1374	C	ILE	139	22.729	7.708	54.930	1.00	35.73	AAAA	C
ATOH	1375	O	ILE	139	21.538	7.890	54.757	1.00	42.61	AAAA	O
ATOH	1376	H	VAL	140	23.286	6.997	53.873	1.00	35.29	AAAA	H
ATOH	1378	CA	VAL	140	22.533	6.481	52.755	1.00	32.39	AAAA	C
ATOH	1379	CB	VAL	140	21.967	7.627	51.881	1.00	36.05	AAAA	C
ATOH	1380	CG1	VAL	140	22.800	8.375	50.881	1.00	25.88	AAAA	C
ATOH	1381	CG2	VAL	140	20.807	7.034	51.047	1.00	34.96	AAAA	C
ATOH	1382	C	VAL	140	23.422	5.670	51.874	1.00	41.96	AAAA	C
ATOH	1383	O	VAL	140	24.537	6.172	51.637	1.00	44.03	AAAA	O
ATOH	1384	H	GLY	141	22.899	4.562	51.402	1.00	42.66	AAAA	H
ATOH	1386	CA	GLY	141	23.381	3.805	50.278	1.00	30.94	AAAA	C
ATOH	1387	C	GLY	141	24.265	2.696	50.835	1.00	38.98	AAAA	C
ATOH	1388	O	GLY	141	25.132	2.003	50.176	1.00	35.87	AAAA	O
ATOH	1389	H	ASN	142	23.985	2.418	52.116	1.00	38.92	AAAA	H
ATOH	1391	CA	ASN	142	24.858	1.390	52.746	1.00	44.32	AAAA	C
ATOH	1392	CB	ASN	142	25.257	1.774	54.187	1.00	43.12	AAAA	C
ATOH	1393	CG	ASN	142	26.131	3.022	54.152	1.00	42.00	AAAA	C
ATOH	1394	OD1	ASN	142	26.904	3.077	53.269	1.00	40.47	AAAA	O
ATOH	1395	HD2	ASN	142	25.945	4.022	55.019	1.00	41.98	AAAA	H
ATOH	1398	C	ASN	142	24.153	0.066	52.687	1.00	45.94	AAAA	C
ATOH	1399	O	ASN	142	23.113	-0.615	52.055	1.00	49.65	AAAA	O
ATOH	1400	H	LYS	143	24.574	-0.990	53.272	1.00	45.23	AAAA	H
ATOH	1402	CA	LYS	143	24.073	-2.299	53.195	1.00	49.14	AAAA	C
ATOH	1403	CB	LYS	143	25.166	-3.328	53.433	1.00	41.49	AAAA	C
ATOH	1404	CG	LYS	143	24.750	-4.686	53.832	1.00	44.96	AAAA	C
ATOH	1405	CD	LYS	143	25.512	-5.743	53.100	1.00	48.66	AAAA	C
ATOH	1406	CE	LYS	143	25.643	-7.131	53.558	1.00	38.35	AAAA	C
ATOH	1407	HD	LYS	143	26.080	-8.093	53.040	1.00	53.83	AAAA	H
ATOH	1411	C	LYS	143	22.902	-2.431	54.169	1.00	52.85	AAAA	C
ATOH	1412	O	LYS	143	22.960	-2.099	55.360	1.00	55.21	AAAA	O
ATOH	1413	H	PRO	144	21.806	-3.047	53.731	1.00	52.39	AAAA	H
ATOH	1414	CD	PRO	144	21.617	-3.469	52.315	1.00	52.58	AAAA	C
ATOH	1415	CA	PRO	144	20.559	-3.118	54.489	1.00	48.30	AAAA	C
ATOH	1416	CB	PRO	144	19.549	-3.602	53.455	1.00	51.41	AAAA	C
ATOH	1417	CG	PRO	144	20.134	-3.299	52.099	1.00	50.41	AAAA	C
ATOH	1418	C	PRO	144	20.621	-4.050	55.659	1.00	44.65	AAAA	C
ATOH	1419	O	PRO	144	20.904	-5.236	55.501	1.00	36.84	AAAA	O
ATOH	1420	H	PRO	145	20.318	-3.533	56.859	1.00	45.12	AAAA	H
ATOH	1421	CD	PRO	145	20.123	-2.054	57.094	1.00	38.17	AAAA	C
ATOH	1422	CA	PRO	145	20.448	-4.233	59.128	1.00	40.19	AAAA	C
ATOH	1423	CB	PRO	145	19.704	-3.298	59.099	1.00	37.08	AAAA	C
ATOH	1424	CG	PRO	145	20.040	-1.910	58.602	1.00	33.65	AAAA	C
ATOH	1425	C	PRO	145	19.993	-5.655	58.155	1.00	47.17	AAAA	C
ATOH	1426	O	PRO	145	20.556	-6.592	58.768	1.00	48.05	AAAA	O
ATOH	1427	H	LYS	146	19.979	-5.924	57.489	1.00	53.72	AAAA	H
ATOH	1429	CA	LYS	146	19.268	-7.229	57.295	1.00	56.94	AAAA	C
ATOH	1430	CB	LYS	146	16.994	-7.050	56.647	1.00	65.44	AAAA	C
ATOH	1431	CG	LYS	146	16.220	-8.232	55.982	1.00	64.32	AAAA	C
ATOH	1432	CD	LYS	146	14.797	-8.422	56.451	0.01	62.75	AAAA	C
ATOH	1433	CE	LYS	146	14.194	-9.717	55.934	0.01	62.14	AAAA	C
ATOH	1434	HD	LYS	146	12.720	-9.610	55.753	0.01	61.38	AAAA	H
ATOH	1436	C	LYS	146	19.138	-8.138	56.446	1.00	61.40	AAAA	C
ATOH	1439	O	LYS	146	19.217	-9.346	56.732	1.00	66.22	AAAA	O
ATOH	1440	H	GLU	147	19.779	-7.649	55.399	1.00	62.92	AAAA	H
ATOH	1442	CA	GLU	147	20.927	-8.446	54.742	1.00	67.00	AAAA	C
ATOH	1443	CB	GLU	147	21.101	-8.070	53.294	1.00	62.32	AAAA	C

PCT/98/00998

Figure 1 displays 12 histograms, labeled  $x_0$  through  $x_{11}$ , showing the distribution of the number of non-zero elements in the vector  $x_k$ . The x-axis represents the number of non-zero elements (0 to 10), and the y-axis represents the count (0 to 10). The distributions are roughly bell-shaped and centered around 5, with the peak count increasing from 10 at  $x_0$  to 12 at  $x_{11}$ .

ATOM	1444	C	GLU	147	19.957	-7.579	52.567	1.00	73.15	AAAA	C
ATOM	1445	CD	GLU	147	20.164	-7.413	51.093	1.00	85.90	AAAA	C
ATOM	1446	OE1	GLU	147	21.339	-7.636	50.701	1.00	95.25	AAAA	C
ATOM	1447	OE2	GLU	147	19.201	-7.053	50.376	1.00	87.47	AAAA	C
ATOM	1448	C	GLU	147	22.136	-8.470	55.541	1.00	69.40	AAAA	C
ATOM	1449	O	GLU	147	22.983	-9.437	55.361	1.00	72.86	AAAA	C
ATOM	1450	H	CYS	148	22.506	-7.484	56.355	1.00	66.76	AAAA	C
ATOM	1452	CA	CYS	148	23.693	-7.588	57.183	1.00	64.65	AAAA	C
ATOM	1453	C	CYS	148	23.598	-8.702	58.195	1.00	65.56	AAAA	C
ATOM	1454	O	CYS	148	24.473	-9.524	58.414	1.00	65.89	AAAA	C
ATOM	1455	CB	CYS	148	23.952	-6.301	58.001	1.00	57.29	AAAA	C
ATOM	1456	SG	CYS	148	24.365	-5.091	56.808	1.00	59.22	AAAA	C
ATOM	1457	H	GLY	149	22.514	-8.743	58.977	1.00	67.88	AAAA	C
ATOM	1459	CA	GLY	149	22.387	-9.744	60.029	1.00	62.15	AAAA	C
ATOM	1460	C	GLY	149	23.443	-9.627	61.120	1.00	59.18	AAAA	C
ATOM	1461	O	GLY	149	23.225	-10.603	61.699	1.00	61.11	AAAA	C
ATOM	1462	H	ASP	150	23.717	-8.426	61.596	1.00	54.88	AAAA	C
ATOM	1464	CA	ASP	150	24.794	-8.198	62.533	1.00	55.78	AAAA	C
ATOM	1465	CB	ASP	150	25.041	-6.703	62.750	1.00	49.10	AAAA	C
ATOM	1466	CG	ASP	150	25.320	-6.034	61.410	1.00	58.50	AAAA	C
ATOM	1467	OD1	ASP	150	25.726	-6.796	60.480	1.00	57.73	AAAA	C
ATOM	1468	OD2	ASP	150	25.102	-4.819	61.363	1.00	49.69	AAAA	C
ATOM	1469	C	ASP	150	24.519	-8.854	63.855	1.00	59.36	AAAA	C
ATOM	1470	O	ASP	150	23.392	-8.820	64.377	1.00	67.48	AAAA	C
ATOM	1471	H	LEU	151	25.532	-9.369	64.524	1.00	54.39	AAAA	C
ATOM	1473	CA	LEU	151	25.314	-9.908	65.853	1.00	52.79	AAAA	C
ATOM	1474	CB	LEU	151	25.208	-11.409	65.806	1.00	58.55	AAAA	C
ATOM	1475	CG	LEU	151	24.063	-12.101	65.092	1.00	69.45	AAAA	C
ATOM	1476	CD1	LEU	151	24.515	-13.421	64.489	1.00	65.26	AAAA	C
ATOM	1477	CD2	LEU	151	22.937	-12.372	65.951	1.00	65.43	AAAA	C
ATOM	1478	C	LEU	151	26.409	-9.454	66.805	1.00	51.93	AAAA	C
ATOM	1479	O	LEU	151	27.598	-9.734	66.634	1.00	55.59	AAAA	C
ATOM	1480	H	CYS	152	26.024	-8.773	67.849	1.00	48.62	AAAA	C
ATOM	1482	CA	CYS	152	26.992	-8.189	68.740	1.00	56.73	AAAA	C
ATOM	1483	C	CYS	152	27.650	-9.325	69.493	1.00	63.58	AAAA	C
ATOM	1484	O	CYS	152	27.074	-10.405	69.575	1.00	62.40	AAAA	C
ATOM	1485	CB	CYS	152	26.358	-7.144	69.657	1.00	41.99	AAAA	C
ATOM	1486	CG	CYS	152	25.985	-5.635	68.703	1.00	55.83	AAAA	C
ATOM	1487	H	PRO	153	28.826	-9.072	70.059	1.00	68.05	AAAA	C
ATOM	1488	CD	PRO	153	29.618	-7.838	69.903	1.00	66.66	AAAA	C

16/58

ATOM	1542	CD	PRO	160	23.789	-12.122	76.395	1.00	88.67	AAAA	C
ATOM	1543	CA	PRO	160	25.463	-10.701	75.361	1.00	84.74	AAAA	C
ATOM	1544	CB	PRO	160	24.125	-9.978	75.456	1.00	84.79	AAAA	C
ATOM	1545	CG	PRO	160	23.370	-10.671	76.515	1.00	84.62	AAAA	C
ATOM	1546	C	PRO	160	26.503	-10.025	76.236	1.00	79.60	AAAA	C
ATOM	1547	O	PRO	160	26.319	-9.934	77.456	1.00	79.70	AAAA	O
ATOM	1548	H	MET	161	27.563	-9.522	75.596	1.00	74.45	AAAA	H
ATOM	1550	CA	MET	161	28.530	-8.735	76.379	1.00	67.04	AAAA	C
ATOM	1551	CB	MET	161	29.924	-9.178	76.038	1.00	69.93	AAAA	C
ATOM	1552	CG	MET	161	30.118	-10.630	75.706	1.00	71.43	AAAA	C
ATOM	1553	SD	MET	161	30.716	-11.621	77.094	1.00	85.25	AAAA	S
ATOM	1554	CE	MET	161	29.941	-10.905	78.471	1.00	69.31	AAAA	C
ATOM	1555	C	MET	161	28.358	-7.234	76.189	1.00	61.76	AAAA	C
ATOM	1556	O	MET	161	28.789	-6.443	77.034	1.00	58.60	AAAA	O
ATOM	1557	H	CYS	162	27.681	-6.819	75.095	1.00	54.81	AAAA	H
ATOM	1559	CA	CYS	162	27.493	-5.384	74.938	1.00	49.76	AAAA	C
ATOM	1560	C	CYS	162	26.306	-4.777	75.670	1.00	51.52	AAAA	C
ATOM	1561	O	CYS	162	25.224	-5.324	75.928	1.00	53.89	AAAA	O
ATOM	1562	CB	CYS	162	27.422	-5.099	73.459	1.00	48.31	AAAA	C
ATOM	1563	SG	CYS	162	28.533	-6.064	72.432	1.00	54.02	AAAA	S
ATOM	1564	H	GLU	163	26.409	-3.522	76.031	1.00	46.31	AAAA	H
ATOM	1566	CA	GLU	163	25.355	-2.675	76.538	1.00	47.19	AAAA	C
ATOM	1567	CB	GLU	163	26.051	-1.412	77.027	1.00	49.95	AAAA	C
ATOM	1568	CG	GLU	163	26.476	-1.364	78.465	1.00	62.30	AAAA	C
ATOM	1569	CD	GLU	163	25.917	-0.135	79.116	1.00	81.67	AAAA	C
ATOM	1570	OE1	GLU	163	26.470	0.473	80.016	1.00	73.22	AAAA	O
ATOM	1571	OE2	GLU	163	24.646	0.208	78.721	1.00	80.93	AAAA	O
ATOM	1572	C	GLU	163	24.299	-2.340	75.472	1.00	49.05	AAAA	C
ATOM	1573	O	GLU	163	24.488	-2.423	74.234	1.00	45.90	AAAA	O
ATOM	1574	H	LYS	164	23.142	-1.815	75.880	1.00	47.43	AAAA	H
ATOM	1576	CA	LYS	164	22.011	-1.499	75.081	1.00	43.92	AAAA	C
ATOM	1577	CB	LYS	164	20.714	-2.244	75.450	1.00	44.48	AAAA	C
ATOM	1578	CG	LYS	164	20.560	-3.639	74.870	1.00	48.65	AAAA	C
ATOM	1579	CD	LYS	164	19.400	-4.432	75.622	1.00	49.04	AAAA	C
ATOM	1580	CE	LYS	164	18.409	-5.012	74.720	1.00	49.21	AAAA	C
ATOM	1581	HC	LYS	164	17.951	-6.372	75.134	1.00	37.67	AAAA	H
ATOM	1585	C	LYS	164	21.615	-0.040	75.204	1.00	45.01	AAAA	C
ATOM	1586	O	LYS	164	21.466	0.484	76.282	1.00	45.69	AAAA	O
ATOM	1587	H	THR	165	21.333	0.570	74.034	1.00	44.94	AAAA	H
ATOM	1589	CA	THR	165	20.775	1.943	74.077	1.00	43.13	AAAA	C
ATOM	1590	CB	THR	165	21.831	2.952	73.553	1.00	47.81	AAAA	C
ATOM	1591	CG1	THR	165	22.053	2.689	72.127	1.00	39.13	AAAA	O
ATOM	1593	CG2	THR	165	23.119	2.842	74.362	1.00	40.40	AAAA	C
ATOM	1594	C	THR	165	19.532	1.881	73.189	1.00	40.92	AAAA	C
ATOM	1595	O	THR	165	19.346	0.897	72.414	1.00	35.91	AAAA	O
ATOM	1596	H	THR	166	18.781	2.985	73.173	1.00	39.18	AAAA	H
ATOM	1598	CA	THR	166	17.689	2.991	72.182	1.00	42.97	AAAA	C
ATOM	1599	CB	THR	166	16.297	3.096	72.833	1.00	55.99	AAAA	C
ATOM	1600	CG1	THR	166	15.662	4.385	72.819	1.00	41.42	AAAA	O
ATOM	1602	CG2	THR	166	16.157	2.740	74.313	1.00	42.83	AAAA	C
ATOM	1603	C	THR	166	17.983	4.051	71.137	1.00	40.17	AAAA	C
ATOM	1604	O	THR	166	18.219	5.206	71.509	1.00	35.72	AAAA	O
ATOM	1605	H	ILE	167	17.912	3.725	69.866	1.00	42.21	AAAA	H
ATOM	1607	CA	ILE	167	18.182	4.672	68.777	1.00	41.05	AAAA	C
ATOM	1608	CB	ILE	167	19.437	4.335	67.904	1.00	39.50	AAAA	C
ATOM	1609	CG2	ILE	167	19.589	5.346	66.716	1.00	15.26	AAAA	C
ATOM	1610	CG1	ILE	167	20.722	4.305	68.724	1.00	36.20	AAAA	C
ATOM	1611	CD1	ILE	167	21.899	3.665	67.966	1.00	35.70	AAAA	C
ATOM	1612	C	ILE	167	16.937	4.524	67.882	1.00	40.94	AAAA	C
ATOM	1613	O	ILE	167	16.655	3.435	67.394	1.00	35.51	AAAA	O
ATOM	1614	H	ASH	168	16.318	5.635	67.537	1.00	42.29	AAAA	H
ATOM	1616	CA	ASH	168	15.112	5.633	66.713	1.00	45.22	AAAA	C
ATOM	1617	CB	ASH	168	15.526	5.253	65.292	1.00	45.69	AAAA	C
ATOM	1618	CG	ASH	168	14.497	5.696	64.244	1.00	51.19	AAAA	C
ATOM	1619	OD1	ASH	168	14.344	5.112	63.150	1.00	41.75	AAAA	O
ATOM	1620	HD2	ASH	168	13.749	6.763	64.522	1.00	48.89	AAAA	H
ATOM	1623	C	ASH	168	13.954	4.739	67.141	1.00	46.55	AAAA	C
ATOM	1624	O	ASH	168	13.544	3.879	66.326	1.00	45.95	AAAA	O
ATOM	1625	H	ASH	169	13.644	4.728	68.433	1.00	45.12	AAAA	H
ATOM	1627	CA	ASH	169	12.717	3.759	69.007	1.00	43.67	AAAA	C
ATOM	1628	CB	ASH	169	11.315	4.106	68.540	1.00	36.84	AAAA	C
ATOM	1629	CG	ASH	169	10.943	5.487	69.093	1.00	42.75	AAAA	C
ATOM	1630	OD1	ASH	169	10.917	5.779	70.280	1.00	36.67	AAAA	O
ATOM	1631	HD2	ASH	169	10.658	6.448	68.213	1.00	40.74	AAAA	H
ATOM	1634	C	ASH	169	13.003	2.306	68.719	1.00	44.69	AAAA	C
ATOM	1635	O	ASH	169	12.100	1.544	68.383	1.00	45.72	AAAA	O
ATOM	1636	H	GLU	170	14.226	1.907	68.862	1.00	41.64	AAAA	H
ATOM	1638	CA	GLU	170	14.655	0.513	68.850	1.00	45.88	AAAA	C
ATOM	1639	CB	GLU	170	15.283	0.278	67.524	1.00	55.92	AAAA	C
ATOM	1640	CG	GLU	170	15.028	-0.953	66.702	1.00	67.08	AAAA	C
ATOM	1641	CD	GLU	170	14.517	-0.605	65.294	1.00	74.56	AAAA	C
ATOM	1642	OE1	GLU	170	13.969	0.466	65.049	1.00	77.75	AAAA	O
ATOM	1643	OE2	GLU	170	14.763	-1.437	64.389	1.00	70.71	AAAA	O
ATOM	1644	C	GLU	170	15.847	0.379	70.010	1.00	47.10	AAAA	C
ATOM	1645	O	GLU	170	16.582	1.172	70.213	1.00	49.92	AAAA	O

PCT/99/00998



17/58

ATOH	1646	H	TYR	171	15.344	-0.462	70.252	1.00	49.19	AAAA	H
ATOH	1648	CA	TYR	171	16.231	-0.689	72.087	1.00	51.61	AAAA	C
ATOH	1649	CB	TYR	171	15.434	-0.861	73.353	1.00	49.94	AAAA	C
ATOH	1650	CG	TYR	171	16.175	-1.168	74.620	1.00	48.90	AAAA	C
ATOH	1651	CD1	TYR	171	16.980	-0.210	75.237	1.00	46.46	AAAA	C
ATOH	1652	CE1	TYR	171	17.634	-0.469	76.467	1.00	41.17	AAAA	C
ATOH	1653	CD2	TYR	171	16.065	-2.429	75.194	1.00	43.62	AAAA	C
ATOH	1654	CE2	TYR	171	16.734	-2.675	76.366	1.00	44.44	AAAA	C
ATOH	1655	CD	TYR	171	17.516	-1.719	76.973	1.00	43.58	AAAA	C
ATOH	1656	OH	TYR	171	18.174	-2.017	78.146	1.00	40.16	AAAA	O
ATOH	1658	C	TYR	171	17.058	-1.938	71.032	1.00	51.41	AAAA	C
ATOH	1659	O	TYR	171	16.519	-3.024	71.088	1.00	52.59	AAAA	O
ATOH	1660	H	ASH	172	18.331	-1.752	71.493	1.00	53.70	AAAA	H
ATOH	1662	CA	ASH	172	19.203	-2.858	71.193	1.00	52.36	AAAA	C
ATOH	1663	CB	ASH	172	19.085	-3.278	69.709	1.00	55.43	AAAA	C
ATOH	1664	CG	ASH	172	18.939	-1.766	69.409	1.00	61.75	AAAA	C
ATOH	1665	OD1	ASH	172	19.233	-5.646	70.304	1.00	61.61	AAAA	O
ATOH	1666	HD2	ASH	172	18.449	-5.048	68.205	1.00	57.97	AAAA	H
ATOH	1669	C	ASH	172	20.665	-2.712	71.560	1.00	43.81	AAAA	C
ATOH	1670	O	ASH	172	21.163	-1.760	72.212	1.00	39.38	AAAA	O
ATOH	1671	H	TYR	173	21.373	-3.796	71.323	1.00	43.20	AAAA	H
ATOH	1673	CA	TYR	173	22.794	-3.929	71.699	1.00	44.76	AAAA	C
ATOH	1674	CB	TYR	173	23.223	-5.374	71.514	1.00	41.66	AAAA	C
ATOH	1675	CG	TYR	173	22.759	-6.274	72.630	1.00	45.18	AAAA	C
ATOH	1676	CD1	TYR	173	21.931	-7.316	72.237	1.00	46.48	AAAA	C
ATOH	1677	CE1	TYR	173	21.438	-8.181	73.193	1.00	51.36	AAAA	C
ATOH	1678	CD2	TYR	173	23.081	-6.132	73.978	1.00	44.86	AAAA	C
ATOH	1679	CE2	TYR	173	22.583	-7.016	74.916	1.00	46.92	AAAA	C
ATOH	1680	CD	TYR	173	21.757	-8.038	74.535	1.00	50.33	AAAA	C
ATOH	1691	OH	TYR	173	21.171	-9.006	75.329	1.00	50.64	AAAA	O
ATOH	1683	C	TYR	173	23.673	-3.099	70.782	1.00	46.94	AAAA	C
ATOH	1684	O	TYR	173	23.389	-2.983	69.567	1.00	49.76	AAAA	O
ATOH	1685	H	ARG	174	24.579	-2.318	71.366	1.00	47.79	AAAA	H
ATOH	1687	CA	ARG	174	25.517	-1.496	70.577	1.00	49.13	AAAA	C
ATOH	1688	CB	ARG	174	25.537	-0.132	71.233	1.00	44.32	AAAA	C
ATOH	1689	CG	ARG	174	24.210	0.623	71.234	1.00	48.14	AAAA	C
ATOH	1690	CD	ARG	174	23.372	0.344	70.003	1.00	51.47	AAAA	C
ATOH	1691	HE	ARG	174	21.974	0.760	70.039	1.00	48.35	AAAA	H
ATOH	1693	CE	ARG	174	21.144	0.570	69.017	1.00	48.23	AAAA	C
ATOH	1694	HH1	ARG	174	21.477	0.022	67.864	1.00	38.96	AAAA	H
ATOH	1697	HH2	ARG	174	19.909	1.022	69.197	1.00	54.65	AAAA	H
ATOH	1700	C	ARG	174	26.921	-2.094	70.461	1.00	45.98	AAAA	C
ATOH	1701	O	ARG	174	27.548	-2.557	71.406	1.00	44.97	AAAA	O
ATOH	1702	H	CYS	175	27.493	-2.183	69.294	1.00	46.21	AAAA	H
ATOH	1704	CA	CYS	175	28.787	-2.758	68.997	1.00	45.60	AAAA	C
ATOH	1705	C	CYS	175	29.407	-2.395	67.665	1.00	46.23	AAAA	C
ATOH	1706	O	CYS	175	28.755	-2.018	66.665	1.00	44.78	AAAA	O
ATOH	1707	CB	CYS	175	28.576	-4.253	69.167	1.00	35.62	AAAA	C
ATOH	1708	SG	CYS	175	27.812	-5.181	67.827	1.00	51.92	AAAA	S
ATOH	1709	H	TRP	176	30.764	-2.517	67.583	1.00	48.16	AAAA	H
ATOH	1711	CA	TRP	176	31.430	-2.091	66.325	1.00	42.48	AAAA	C
ATOH	1712	CB	TRP	176	32.769	-1.409	66.564	1.00	36.38	AAAA	C
ATOH	1713	CG	TRP	176	32.689	-0.069	67.203	1.00	25.56	AAAA	C
ATOH	1714	CD2	TRP	176	32.588	1.186	66.480	1.00	23.71	AAAA	C
ATOH	1715	CE2	TRP	176	32.552	2.217	67.422	1.00	32.40	AAAA	C
ATOH	1716	CE3	TRP	176	32.535	1.520	65.141	1.00	24.31	AAAA	C
ATOH	1717	CD1	TRP	176	32.730	0.257	68.525	1.00	28.37	AAAA	C
ATOH	1718	HE1	TRP	176	32.636	1.636	68.678	1.00	37.21	AAAA	H
ATOH	1720	CD2	TRP	176	32.441	3.565	67.088	1.00	28.51	AAAA	C
ATOH	1721	CE3	TRP	176	32.447	2.822	64.789	1.00	22.23	AAAA	C
ATOH	1722	CH2	TRP	176	32.406	3.817	65.745	1.00	29.51	AAAA	C
ATOH	1723	C	TRP	176	31.631	-3.268	65.109	1.00	39.30	AAAA	C
ATOH	1724	O	TRP	176	31.703	-3.121	64.199	1.00	39.15	AAAA	O
ATOH	1725	H	THR	177	31.682	-4.460	66.005	1.00	41.33	AAAA	H
ATOH	1727	CA	THR	177	31.964	-5.644	65.161	1.00	49.28	AAAA	C
ATOH	1728	CB	THR	177	33.480	-6.062	65.162	1.00	43.66	AAAA	C
ATOH	1729	CG1	THR	177	34.309	-5.025	64.613	1.00	47.85	AAAA	O
ATOH	1731	CG2	THR	177	33.676	-7.271	64.283	1.00	58.51	AAAA	C
ATOH	1732	C	THR	177	31.290	-6.814	65.859	1.00	48.76	AAAA	C
ATOH	1733	O	THR	177	30.982	-6.539	67.001	1.00	51.53	AAAA	O
ATOH	1734	H	THR	178	31.269	-8.000	65.331	1.00	51.96	AAAA	H
ATOH	1736	CA	THR	178	30.924	-9.236	65.848	1.00	58.95	AAAA	C
ATOH	1737	CB	THR	178	31.253	-10.500	65.092	1.00	66.55	AAAA	C
ATOH	1738	CG1	THR	178	31.505	-10.066	63.734	1.00	75.70	AAAA	O
ATOH	1740	CG2	THR	178	30.104	-11.489	65.148	1.00	74.23	AAAA	C
ATOH	1741	C	THR	178	31.714	-9.539	67.213	1.00	60.25	AAAA	C
ATOH	1742	O	THR	178	31.204	-10.202	68.135	1.00	66.05	AAAA	O
ATOH	1743	H	ASH	179	32.977	-9.130	67.253	1.00	57.56	AAAA	H
ATOH	1745	CA	ASH	179	33.793	-9.392	68.445	1.00	53.39	AAAA	C
ATOH	1746	CB	ASH	179	35.130	-10.924	68.068	1.00	48.46	AAAA	C
ATOH	1747	CG	ASH	179	34.997	-11.218	67.126	1.00	56.25	AAAA	C
ATOH	1748	OD1	ASH	179	34.412	-12.294	67.553	1.00	51.38	AAAA	O
ATOH	1749	HD2	ASH	179	35.229	-11.063	65.963	1.00	48.10	AAAA	H
ATOH	1752	C	ASH	179	34.096	-0.109	69.295	1.00	50.79	AAAA	C
ATOH	1753	O	ASH	179	34.556	-8.377	70.429	1.00	57.97	AAAA	O

100280-525550

ATOM	1754	H	ARG	180	33.626	-7.022	68.913	1.00	47.06	AAAA	H
ATOM	1756	CA	ARG	180	33.908	-5.820	69.691	1.00	48.25	AAAA	C
ATOM	1757	CB	ARG	180	34.925	-4.962	69.674	1.00	49.72	AAAA	C
ATOM	1758	CG	ARG	180	36.324	-5.501	69.285	1.00	60.92	AAAA	C
ATOM	1759	CD	ARG	180	37.288	-4.948	68.279	1.00	70.83	AAAA	C
ATOM	1760	HE	ARG	180	38.569	-5.605	68.203	1.00	76.18	AAAA	H
ATOM	1762	CG	ARG	180	39.298	-5.895	69.276	1.00	76.59	AAAA	C
ATOM	1763	HH1	ARG	180	38.877	-5.608	70.498	1.00	80.82	AAAA	H
ATOM	1766	HH2	ARG	180	40.474	-6.478	69.180	1.00	79.33	AAAA	H
ATOM	1769	C	ARG	180	32.530	-4.977	69.821	1.00	48.10	AAAA	C
ATOM	1770	O	ARG	180	31.862	-4.476	68.905	1.00	46.99	AAAA	O
ATOM	1771	H	CYS	181	32.230	-4.728	71.063	1.00	44.80	AAAA	H
ATOM	1773	CA	CYS	181	31.199	-3.924	71.619	1.00	45.20	AAAA	C
ATOM	1774	C	CYS	181	31.646	-2.463	71.692	1.00	44.50	AAAA	C
ATOM	1775	O	CYS	181	32.835	-2.227	71.724	1.00	47.09	AAAA	O
ATOM	1776	CB	CYS	181	30.940	-4.282	73.110	1.00	43.88	AAAA	C
ATOM	1777	SG	CYS	181	39.363	-5.944	73.316	1.00	56.08	AAAA	S
ATOM	1778	H	GLN	182	30.659	-1.600	71.690	1.00	39.30	AAAA	H
ATOM	1780	CA	GLN	182	30.948	-0.177	71.690	1.00	43.43	AAAA	C
ATOM	1781	CB	GLN	182	29.749	0.619	71.186	1.00	23.59	AAAA	C
ATOM	1782	CG	GLN	182	29.809	2.085	71.435	1.00	28.57	AAAA	C
ATOM	1783	CD	GLN	182	28.757	2.867	70.733	1.00	29.35	AAAA	C
ATOM	1784	OE1	GLN	182	27.898	2.304	70.033	1.00	38.55	AAAA	O
ATOM	1785	HE2	GLN	182	28.857	4.164	70.912	1.00	28.14	AAAA	H
ATOM	1788	C	GLN	182	31.218	0.089	73.162	1.00	46.07	AAAA	C
ATOM	1789	O	GLN	182	30.458	-0.327	74.041	1.00	47.01	AAAA	O
ATOM	1790	H	LYS	183	32.213	0.866	73.524	1.00	46.98	AAAA	H
ATOM	1792	CA	LYS	183	32.479	1.064	74.934	1.00	45.26	AAAA	C
ATOM	1793	CB	LYS	183	33.966	1.275	75.185	1.00	48.68	AAAA	C
ATOM	1794	CG	LYS	183	34.865	0.267	74.482	1.00	47.95	AAAA	C
ATOM	1795	CD	LYS	183	36.237	0.734	74.523	1.00	48.06	AAAA	C
ATOM	1796	CE	LYS	183	37.178	-0.208	73.684	1.00	46.78	AAAA	C
ATOM	1797	HC	LYS	183	38.489	-0.654	74.158	1.00	44.00	AAAA	H
ATOM	1801	C	LYS	183	31.659	2.205	75.477	1.00	48.13	AAAA	C
ATOM	1802	O	LYS	183	31.679	3.305	74.946	1.00	48.84	AAAA	O
ATOM	1803	H	HET	184	31.165	2.014	76.698	1.00	52.59	AAAA	H
ATOM	1805	CA	HET	184	30.388	3.041	77.413	1.00	53.22	AAAA	C
ATOM	1806	CB	HET	184	28.927	2.613	77.537	1.00	54.27	AAAA	C
ATOM	1807	CG	HET	184	27.855	2.955	76.536	1.00	56.16	AAAA	C
ATOM	1808	SD	HET	184	26.911	1.601	75.912	1.00	57.56	AAAA	S
ATOM	1809	CE	HET	184	26.738	1.855	74.171	1.00	46.57	AAAA	C
ATOM	1810	C	HET	184	31.051	3.200	78.770	1.00	50.55	AAAA	C
ATOM	1811	O	HET	184	31.770	2.292	79.116	1.00	48.82	AAAA	O
ATOM	1812	H	CYS	185	30.796	4.195	79.565	1.00	53.97	AAAA	H
ATOM	1814	CA	CYS	185	31.342	4.365	80.892	1.00	58.63	AAAA	C
ATOM	1815	C	CYS	185	30.297	4.320	81.989	1.00	65.16	AAAA	C
ATOM	1816	O	CYS	185	29.133	4.649	81.761	1.00	65.87	AAAA	O
ATOM	1817	CB	CYS	185	31.965	5.772	81.000	1.00	60.37	AAAA	C
ATOM	1818	SG	CYS	185	33.623	5.771	80.312	1.00	60.09	AAAA	S
ATOM	1819	H	PRO	186	30.688	3.978	83.206	1.00	69.41	AAAA	H
ATOM	1820	CD	PRO	186	32.066	3.777	83.702	1.00	71.11	AAAA	C
ATOM	1821	CA	PRO	186	29.717	3.933	84.304	1.00	69.11	AAAA	C
ATOM	1822	CB	PRO	186	30.523	3.487	85.503	1.00	68.03	AAAA	C
ATOM	1823	CG	PRO	186	31.910	3.920	85.198	1.00	71.02	AAAA	C
ATOM	1824	C	PRO	186	29.120	5.320	84.431	1.00	69.47	AAAA	C
ATOM	1825	O	PRO	186	29.820	6.345	84.507	1.00	65.93	AAAA	O
ATOM	1826	H	SER	187	27.801	5.367	84.546	1.00	68.78	AAAA	H
ATOM	1828	CA	SER	187	27.050	6.592	84.750	1.00	69.29	AAAA	C
ATOM	1829	CB	SER	187	25.594	6.287	85.129	1.00	78.29	AAAA	C
ATOM	1830	CG	SER	187	25.474	4.935	85.563	1.00	91.78	AAAA	O
ATOM	1832	C	SER	187	27.630	7.476	85.836	1.00	67.19	AAAA	C
ATOM	1833	O	SER	187	27.606	8.708	85.803	1.00	63.98	AAAA	O
ATOM	1834	H	THR	188	28.108	6.853	86.998	1.00	68.20	AAAA	H
ATOM	1836	CA	THR	188	28.870	7.507	87.963	1.00	68.39	AAAA	C
ATOM	1837	CB	THR	188	29.805	6.459	88.618	1.00	73.84	AAAA	C
ATOM	1838	CG1	THR	188	28.943	5.365	89.016	1.00	89.33	AAAA	O
ATOM	1840	CG2	THR	188	30.605	7.048	89.759	1.00	73.71	AAAA	C
ATOM	1841	C	THR	188	29.802	8.583	97.429	1.00	67.52	AAAA	C
ATOM	1842	O	THR	188	29.843	9.739	87.834	1.00	68.30	AAAA	O
ATOM	1843	H	CYS	189	30.643	8.247	86.446	1.00	63.89	AAAA	H
ATOM	1845	CA	CYS	189	31.583	9.116	85.917	1.00	57.29	AAAA	C
ATOM	1846	C	CYS	189	30.951	10.331	85.195	1.00	57.70	AAAA	C
ATOM	1847	O	CYS	189	31.648	11.327	85.017	1.00	57.56	AAAA	O
ATOM	1848	CB	CYS	189	32.416	8.372	84.769	1.00	58.67	AAAA	C
ATOM	1849	SG	CYS	189	33.347	7.001	85.535	1.00	53.46	AAAA	S
ATOM	1850	H	GLY	190	29.689	10.322	84.806	1.00	56.91	AAAA	H
ATOM	1852	CA	GLY	190	29.038	11.521	84.323	1.00	57.28	AAAA	C
ATOM	1853	C	GLY	190	29.444	11.834	82.886	1.00	59.62	AAAA	C
ATOM	1854	O	GLY	190	29.609	10.932	82.082	1.00	57.91	AAAA	O
ATOM	1855	H	LYS	191	29.842	13.052	82.624	1.00	62.78	AAAA	H
ATOM	1857	CA	LYS	191	30.359	13.520	81.364	1.00	67.72	AAAA	C
ATOM	1858	CB	LYS	191	30.058	15.035	81.214	1.00	72.76	AAAA	C
ATOM	1859	CG	LYS	191	28.568	15.288	81.302	1.00	84.69	AAAA	C
ATOM	1860	CD	LYS	191	28.207	16.733	80.723	1.00	90.15	AAAA	C
ATOM	1861	CE	LYS	191	26.713	16.806	80.471	1.00	91.83	AAAA	C

09555275-003001

19/58

ATOH	1862	HC	LYS	191	26.368	16.182	79.152	1.00	97.62	AAAA	H
ATOH	1866	C	LYS	191	31.868	13.299	91.270	1.00	70.13	AAAA	C
ATOH	1867	O	LYS	191	32.486	13.935	90.415	1.00	71.76	AAAA	O
ATOH	1868	H	ARG	192	32.488	12.441	82.079	1.00	66.29	AAAA	H
ATOH	1870	CA	ARG	192	33.885	12.171	82.044	1.00	59.95	AAAA	C
ATOH	1871	CB	ARG	192	34.505	12.070	83.432	1.00	66.58	AAAA	C
ATOH	1872	CG	ARG	192	34.670	13.400	84.131	1.00	71.59	AAAA	C
ATOH	1873	CD	ARG	192	34.386	13.330	85.625	1.00	73.91	AAAA	C
ATOH	1874	HE	ARG	192	35.622	13.280	86.377	1.00	85.74	AAAA	H
ATOH	1876	CE	ARG	192	35.968	12.407	87.330	1.00	90.67	AAAA	C
ATOH	1877	HH1	ARG	192	35.026	11.486	87.600	1.00	88.49	AAAA	H
ATOH	1880	HH2	ARG	192	37.162	12.463	87.950	1.00	72.95	AAAA	H
ATOH	1883	C	ARG	192	34.221	10.851	81.337	1.00	58.83	AAAA	C
ATOH	1884	O	ARG	192	33.336	10.007	81.176	1.00	55.13	AAAA	O
ATOH	1885	H	ALA	193	35.521	10.795	80.968	1.00	50.19	AAAA	H
ATOH	1887	CA	ALA	193	35.962	9.557	80.355	1.00	46.24	AAAA	C
ATOH	1888	CB	ALA	193	37.167	9.921	79.541	1.00	45.15	AAAA	C
ATOH	1889	C	ALA	193	36.221	8.525	81.451	1.00	48.97	AAAA	C
ATOH	1890	O	ALA	193	36.220	8.908	82.616	1.00	44.80	AAAA	O
ATOH	1891	H	CYS	194	36.544	7.304	91.065	1.00	50.30	AAAA	H
ATOH	1893	CA	CYS	194	36.836	6.302	82.043	1.00	57.50	AAAA	C
ATOH	1894	C	CYS	194	37.834	5.304	81.448	1.00	61.25	AAAA	C
ATOH	1895	O	CYS	194	37.952	5.291	80.216	1.00	61.52	AAAA	O
ATOH	1896	CB	CYS	194	35.510	5.741	82.504	1.00	57.96	AAAA	C
ATOH	1897	SG	CYS	194	34.785	4.524	81.402	1.00	54.49	AAAA	S
ATOH	1898	H	THR	195	38.422	4.459	82.311	1.00	58.51	AAAA	H
ATOH	1900	CA	THR	195	39.462	3.584	81.913	1.00	57.42	AAAA	C
ATOH	1901	CB	THR	195	40.237	3.142	83.188	1.00	65.73	AAAA	C
ATOH	1902	OG1	THR	195	40.288	4.248	84.091	1.00	70.15	AAAA	O
ATOH	1904	OG2	THR	195	41.684	2.864	82.745	1.00	77.91	AAAA	C
ATOH	1905	C	THR	195	38.857	2.404	81.226	1.00	54.59	AAAA	C
ATOH	1906	O	THR	195	37.633	2.315	81.319	1.00	58.75	AAAA	O
ATOH	1907	H	GLU	196	39.610	1.408	80.882	1.00	55.95	AAAA	H
ATOH	1909	CA	GLU	196	39.139	0.145	80.364	1.00	60.07	AAAA	C
ATOH	1910	CB	GLU	196	40.395	-0.612	79.914	1.00	68.06	AAAA	C
ATOH	1911	CG	GLU	196	40.479	-1.146	78.526	1.00	73.96	AAAA	C
ATOH	1912	CD	GLU	196	39.235	-0.983	77.670	1.00	83.08	AAAA	C
ATOH	1913	OE1	GLU	196	38.356	-1.884	77.687	1.00	81.19	AAAA	O
ATOH	1914	OE2	GLU	196	39.060	0.041	76.939	1.00	82.10	AAAA	O
ATOH	1915	C	GLU	196	38.382	-0.579	81.467	1.00	63.91	AAAA	C
ATOH	1916	O	GLU	196	37.690	-1.537	81.159	1.00	63.51	AAAA	O
ATOH	1917	H	ASN	197	38.666	-0.312	82.739	1.00	67.40	AAAA	H
ATOH	1919	CA	ASN	197	38.025	-0.947	83.886	1.00	69.21	AAAA	C
ATOH	1920	CB	ASN	197	39.021	-1.394	84.966	1.00	68.49	AAAA	C
ATOH	1921	CG	ASN	197	39.722	-2.692	84.672	0.01	69.09	AAAA	C
ATOH	1922	OD1	ASN	197	40.364	-3.273	85.551	0.01	69.04	AAAA	O
ATOH	1923	HD2	ASN	197	39.622	-3.183	83.443	0.01	68.97	AAAA	H
ATOH	1926	C	ASN	197	37.033	0.043	84.486	1.00	69.01	AAAA	C
ATOH	1927	O	ASN	197	36.845	0.281	85.664	1.00	68.24	AAAA	O
ATOH	1928	H	ASN	198	36.384	0.795	83.607	1.00	69.91	AAAA	H
ATOH	1930	CA	ASN	198	35.356	1.734	84.048	1.00	68.48	AAAA	C
ATOH	1931	CB	ASN	198	34.120	0.880	84.373	1.00	60.12	AAAA	C
ATOH	1932	CG	ASN	198	33.806	0.095	83.102	1.00	69.29	AAAA	C
ATOH	1933	OD1	ASN	198	33.475	0.654	82.054	1.00	73.20	AAAA	O
ATOH	1934	HD2	ASN	198	33.980	-1.206	83.268	1.00	65.34	AAAA	H
ATOH	1937	C	ASN	198	35.784	2.563	85.228	1.00	64.01	AAAA	C
ATOH	1938	O	ASN	199	34.992	2.827	86.117	1.00	64.20	AAAA	O
ATOH	1939	H	GLU	199	36.955	3.164	85.157	1.00	64.75	AAAA	H
ATOH	1941	CA	GLU	199	37.342	4.054	86.255	1.00	64.61	AAAA	C
ATOH	1942	CB	GLU	199	38.702	3.624	86.744	1.00	66.11	AAAA	C
ATOH	1943	CG	GLU	199	38.846	3.717	88.233	1.00	77.15	AAAA	C
ATOH	1944	CD	GLU	199	39.579	2.532	88.832	1.00	80.24	AAAA	C
ATOH	1945	OE1	GLU	199	39.385	2.406	90.066	1.00	81.65	AAAA	O
ATOH	1946	OE2	GLU	199	40.282	1.821	88.079	1.00	77.94	AAAA	O
ATOH	1947	C	GLU	199	37.314	5.463	85.690	1.00	62.92	AAAA	C
ATOH	1948	O	GLU	199	37.927	5.676	94.632	1.00	63.62	AAAA	O
ATOH	1949	H	CYS	200	36.605	6.393	96.313	1.00	56.16	AAAA	H
ATOH	1951	CA	CYS	200	36.600	7.721	85.740	1.00	55.11	AAAA	C
ATOH	1952	C	CYS	200	37.978	8.315	85.521	1.00	57.77	AAAA	C
ATOH	1953	O	CYS	200	38.884	8.058	86.300	1.00	63.79	AAAA	O
ATOH	1954	CB	CYS	200	35.824	8.664	86.048	1.00	52.70	AAAA	C
ATOH	1955	SG	CYS	200	34.196	8.100	87.098	1.00	55.85	AAAA	S
ATOH	1956	H	CYS	201	38.124	9.192	84.540	1.00	54.50	AAAA	H
ATOH	1958	CA	CYS	201	39.338	9.889	84.202	1.00	48.19	AAAA	C
ATOH	1959	C	CYS	201	39.236	11.287	84.786	1.00	42.34	AAAA	C
ATOH	1960	O	CYS	201	39.165	11.704	85.166	1.00	54.32	AAAA	O
ATOH	1961	CB	CYS	201	39.590	10.070	82.695	1.00	40.90	AAAA	C
ATOH	1962	SG	CYS	201	39.644	8.597	91.747	1.00	51.42	AAAA	S
ATOH	1963	H	HIS	202	40.254	12.075	84.675	1.00	39.12	AAAA	H
ATOH	1965	CA	HIS	202	40.290	13.461	85.128	1.00	41.55	AAAA	C
ATOH	1966	C	HIS	202	39.284	14.184	84.289	1.00	46.59	AAAA	C
ATOH	1967	O	HIS	202	39.176	13.851	83.103	1.00	51.64	AAAA	O
ATOH	1968	CB	HIS	202	41.712	13.952	94.819	1.00	45.20	AAAA	C
ATOH	1969	CG	HIS	202	41.996	15.330	85.267	1.00	39.71	AAAA	C
ATOH	1970	HD1	HIS	202	41.501	16.404	84.550	1.00	51.32	AAAA	H

1005505-003004

20/58

ATCH	1971	CE1	HIS	202	41.887	17.528	85.173	1.00	47.62	AAAA	C
ATCH	1972	CE2	HIS	202	42.665	15.813	86.340	1.00	39.59	AAAA	C
ATCH	1973	HE2	HIS	202	42.563	17.207	86.258	1.00	43.48	AAAA	H
ATCH	1975	H	PRO	203	38.738	15.293	84.711	1.00	47.74	AAAA	H
ATCH	1976	CD	PRO	203	38.758	15.840	86.082	1.00	46.97	AAAA	C
ATCH	1977	CA	PRO	203	37.780	15.987	83.879	1.00	46.44	AAAA	C
ATCH	1979	CB	PRO	203	37.248	17.107	84.742	1.00	39.47	AAAA	C
ATCH	1979	CG	PRO	203	38.131	17.210	85.910	1.00	43.37	AAAA	C
ATCH	1980	C	PRO	203	38.440	16.519	82.607	1.00	53.27	AAAA	C
ATCH	1981	O	PRO	203	37.698	17.045	81.731	1.00	53.16	AAAA	O
ATCH	1982	H	GLU	204	39.792	16.535	82.561	1.00	50.34	AAAA	H
ATCH	1984	CA	GLU	204	40.439	17.139	91.381	1.00	50.52	AAAA	C
ATCH	1985	CB	GLU	204	41.727	17.891	91.804	1.00	48.58	AAAA	C
ATCH	1986	CG	GLU	204	41.397	19.251	92.397	1.00	43.74	AAAA	C
ATCH	1987	CD	GLU	204	40.778	20.282	91.501	1.00	55.26	AAAA	C
ATCH	1988	OE1	GLU	204	40.766	20.344	90.249	1.00	64.04	AAAA	O
ATCH	1989	OE2	GLU	204	40.226	21.198	92.141	1.00	57.66	AAAA	O
ATCH	1990	C	GLU	204	40.718	16.084	90.319	1.00	45.71	AAAA	C
ATCH	1991	O	GLU	204	41.238	16.405	79.251	1.00	46.56	AAAA	O
ATCH	1992	H	CYS	205	40.612	14.830	80.735	1.00	42.05	AAAA	H
ATCH	1994	CA	CYS	205	40.997	13.764	79.838	1.00	45.81	AAAA	C
ATCH	1995	C	CYS	205	39.892	13.628	78.819	1.00	49.20	AAAA	C
ATCH	1996	O	CYS	205	38.746	13.920	79.133	1.00	50.34	AAAA	O
ATCH	1997	CB	CYS	205	41.288	12.491	80.572	1.00	51.55	AAAA	C
ATCH	1998	SG	CYS	205	42.923	12.246	81.251	1.00	52.89	AAAA	S
ATCH	1999	H	LEU	206	40.232	13.579	77.520	1.00	49.88	AAAA	H
ATCH	2001	CA	LEU	206	39.169	13.446	76.533	1.00	41.49	AAAA	C
ATCH	2002	CB	LEU	206	39.266	14.505	75.462	1.00	48.66	AAAA	C
ATCH	2003	CG	LEU	206	38.274	14.365	74.305	1.00	47.45	AAAA	C
ATCH	2004	CD1	LEU	206	36.879	14.243	74.895	1.00	45.79	AAAA	C
ATCH	2005	CD2	LEU	206	38.331	15.599	73.420	1.00	50.71	AAAA	C
ATCH	2006	C	LEU	206	39.310	12.109	75.912	1.00	38.44	AAAA	C
ATCH	2007	O	LEU	206	40.400	11.568	75.813	1.00	36.59	AAAA	O
ATCH	2008	H	GLY	207	38.264	11.359	75.681	1.00	42.41	AAAA	H
ATCH	2010	CA	GLY	207	38.403	10.098	74.978	1.00	40.57	AAAA	C
ATCH	2011	C	GLY	207	38.466	9.061	76.058	1.00	47.15	AAAA	C
ATCH	2012	O	GLY	207	37.668	8.102	76.057	1.00	45.04	AAAA	O
ATCH	2013	H	SER	208	39.622	9.079	76.760	1.00	50.36	AAAA	H
ATCH	2015	CA	SER	208	39.832	7.898	77.660	1.00	48.27	AAAA	C
ATCH	2016	CB	SER	208	39.909	6.631	76.787	1.00	35.77	AAAA	C
ATCH	2017	OG	SER	208	40.600	5.597	77.461	1.00	61.34	AAAA	O
ATCH	2019	C	SER	208	41.144	8.068	78.377	1.00	49.17	AAAA	C
ATCH	2020	O	SER	208	41.781	9.084	78.163	1.00	48.24	AAAA	O
ATCH	2021	H	CYS	209	41.599	7.123	79.189	1.00	52.04	AAAA	H
ATCH	2023	CA	CYS	209	42.824	7.307	79.964	1.00	55.98	AAAA	C
ATCH	2024	C	CYS	209	43.453	6.035	80.484	1.00	57.41	AAAA	C
ATCH	2025	O	CYS	209	42.862	4.963	80.423	1.00	58.33	AAAA	O
ATCH	2026	CB	CYS	209	42.629	8.258	81.146	1.00	52.51	AAAA	C
ATCH	2027	SG	CYS	209	41.380	7.602	82.261	1.00	58.22	AAAA	S
ATCH	2028	H	SER	210	44.734	6.145	80.883	1.00	59.37	AAAA	H
ATCH	2030	CA	SER	210	45.506	4.950	81.318	1.00	58.10	AAAA	C
ATCH	2031	CB	SER	210	47.022	5.083	91.105	1.00	55.07	AAAA	C
ATCH	2032	OG	SER	210	47.546	6.204	91.819	1.00	64.49	AAAA	O
ATCH	2034	C	SER	210	45.331	4.713	92.826	1.00	56.34	AAAA	C
ATCH	2035	O	SER	210	45.529	3.614	83.326	1.00	54.42	AAAA	O
ATCH	2036	H	ALA	211	45.105	5.806	83.548	1.00	52.79	AAAA	H
ATCH	2038	CA	ALA	211	44.980	5.684	85.004	1.00	56.60	AAAA	C
ATCH	2039	CB	ALA	211	46.333	5.926	85.649	1.00	63.41	AAAA	C
ATCH	2040	C	ALA	211	43.962	6.747	85.395	1.00	56.58	AAAA	C
ATCH	2041	O	ALA	211	43.957	7.792	84.711	1.00	50.78	AAAA	O
ATCH	2042	H	PRO	212	43.117	6.416	86.359	1.00	55.93	AAAA	H
ATCH	2043	CD	PRO	212	43.042	5.166	87.115	1.00	55.86	AAAA	C
ATCH	2044	CA	PRO	212	41.951	7.257	86.575	1.00	55.50	AAAA	C
ATCH	2045	CB	PRO	212	41.104	6.470	87.556	1.00	59.65	AAAA	C
ATCH	2046	CG	PRO	212	42.021	5.403	88.175	1.00	51.56	AAAA	C
ATCH	2047	C	PRO	212	42.409	8.535	87.177	1.00	53.64	AAAA	C
ATCH	2048	O	PRO	212	43.611	8.725	87.393	1.00	57.48	AAAA	O
ATCH	2049	H	ALA	213	41.537	9.492	87.347	1.00	53.87	AAAA	H
ATCH	2051	CA	ALA	213	41.912	10.710	98.057	1.00	59.41	AAAA	C
ATCH	2052	CB	ALA	213	41.783	10.255	99.541	1.00	66.40	AAAA	C
ATCH	2053	C	ALA	213	43.289	11.300	87.907	1.00	61.40	AAAA	C
ATCH	2054	O	ALA	213	43.729	12.202	99.652	1.00	60.03	AAAA	O
ATCH	2055	H	ASH	214	44.068	10.999	86.899	1.00	64.80	AAAA	H
ATCH	2057	CA	ASH	214	45.366	11.551	86.596	1.00	63.36	AAAA	C
ATCH	2063	C	ASH	214	45.300	12.284	95.251	1.00	61.56	AAAA	C
ATCH	2064	O	ASH	214	45.198	11.794	84.117	1.00	58.38	AAAA	O
ATCH	2058	CB	ASH	214	46.336	10.379	86.608	1.00	67.32	AAAA	C
ATCH	2059	CG	ASH	214	47.697	10.896	86.362	1.00	75.48	AAAA	C
ATCH	2060	OD1	ASH	214	48.254	11.105	85.302	1.00	83.64	AAAA	O
ATCH	2061	HD2	ASH	214	48.513	11.170	87.427	1.00	90.05	AAAA	H
ATCH	2065	H	ASP	215	45.666	13.565	85.305	1.00	59.78	AAAA	H
ATCH	2067	CA	ASP	215	45.618	14.432	84.143	1.00	56.47	AAAA	C
ATCH	2068	CB	ASP	215	45.430	15.926	84.446	1.00	40.19	AAAA	C
ATCH	2069	CG	ASP	215	46.671	16.543	84.986	1.00	56.36	AAAA	C
ATCH	2070	OD1	ASP	215	46.590	17.699	85.473	1.00	56.17	AAAA	O

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21/58

ATOH	2071	GG2	ASP	215	47.766	15.826	84.941	1.00	50.21	AAAA	O
ATOH	2072	C	ASP	215	46.819	14.315	93.221	1.00	53.78	AAAA	C
ATOH	2073	C	ASP	215	46.998	15.148	82.322	1.00	53.58	AAAA	O
ATOH	2074	H	THR	216	47.719	13.425	83.511	1.00	50.87	AAAA	H
ATOH	2076	CA	THR	216	48.883	13.114	82.734	1.00	45.76	AAAA	C
ATOH	2077	CB	THR	216	50.201	13.176	83.529	1.00	53.46	AAAA	C
ATOH	2078	GG1	THR	216	50.403	11.977	84.335	1.00	45.14	AAAA	O
ATOH	2080	GG2	THR	216	50.436	14.314	84.518	1.00	41.38	AAAA	C
ATOH	2081	C	THR	216	48.681	11.712	82.158	1.00	48.34	AAAA	C
ATOH	2082	C	THR	216	49.595	11.282	81.444	1.00	47.49	AAAA	O
ATOH	2083	H	ALA	217	47.559	11.057	92.476	1.00	49.65	AAAA	H
ATOH	2085	CA	ALA	217	47.259	9.760	81.845	1.00	51.83	AAAA	C
ATOH	2086	CB	ALA	217	46.908	9.775	82.943	1.00	52.62	AAAA	C
ATOH	2087	C	ALA	217	46.237	9.747	80.709	1.00	50.60	AAAA	C
ATOH	2088	C	ALA	217	45.775	8.632	80.335	1.00	49.13	AAAA	O
ATOH	2089	H	CYS	218	45.744	10.905	80.226	1.00	43.56	AAAA	H
ATOH	2091	CA	CYS	218	44.862	11.030	79.157	1.00	48.09	AAAA	C
ATOH	2092	C	CYS	218	45.166	10.331	79.869	1.00	47.06	AAAA	C
ATOH	2093	C	CYS	218	46.360	9.967	77.642	1.00	55.57	AAAA	O
ATOH	2094	CB	CYS	218	44.536	12.501	78.775	1.00	51.54	AAAA	C
ATOH	2095	SG	CYS	218	44.256	13.494	80.302	1.00	56.99	AAAA	S
ATOH	2096	H	VAL	219	44.226	10.085	75.978	1.00	43.40	AAAA	H
ATOH	2098	CA	VAL	219	44.575	9.547	75.654	1.00	35.22	AAAA	C
ATOH	2099	CB	VAL	219	43.693	8.427	75.242	1.00	32.26	AAAA	C
ATOH	2100	GG1	VAL	219	43.952	7.873	73.886	1.00	36.19	AAAA	C
ATOH	2101	GG2	VAL	219	43.811	7.144	76.071	1.00	45.51	AAAA	C
ATOH	2102	C	VAL	219	44.453	10.750	74.735	1.00	32.06	AAAA	C
ATOH	2103	C	VAL	219	45.303	10.897	73.874	1.00	42.27	AAAA	O
ATOH	2104	H	ALA	220	43.729	11.753	75.187	1.00	24.24	AAAA	H
ATOH	2106	CA	ALA	220	43.630	12.085	74.385	1.00	27.99	AAAA	C
ATOH	2107	CB	ALA	220	42.536	12.919	73.331	1.00	28.42	AAAA	C
ATOH	2108	C	ALA	220	43.292	14.071	75.390	1.00	29.21	AAAA	C
ATOH	2109	C	ALA	220	42.846	13.604	76.455	1.00	37.89	AAAA	O
ATOH	2110	H	CYS	221	43.285	15.334	75.058	1.00	30.27	AAAA	H
ATOH	2112	CA	CYS	221	42.753	16.382	75.875	1.00	35.55	AAAA	C
ATOH	2113	C	CYS	221	41.460	17.055	75.452	1.00	47.06	AAAA	C
ATOH	2114	C	CYS	221	41.265	17.598	74.368	1.00	42.57	AAAA	O
ATOH	2115	CB	CYS	221	43.804	17.478	76.063	1.00	47.45	AAAA	C
ATOH	2116	SG	CYS	221	45.494	16.935	76.538	1.00	47.06	AAAA	S
ATOH	2117	H	ARG	222	40.503	17.133	76.396	1.00	51.47	AAAA	H
ATOH	2119	CA	ARG	222	39.291	17.906	76.338	1.00	51.86	AAAA	C
ATOH	2120	CB	ARG	222	38.647	18.074	77.712	1.00	54.53	AAAA	C
ATOH	2121	CG	ARG	222	37.314	18.687	77.854	1.00	45.56	AAAA	C
ATOH	2122	CD	ARG	222	36.538	18.338	79.087	1.00	54.45	AAAA	C
ATOH	2123	HE	ARG	222	36.272	16.947	79.269	1.00	65.53	AAAA	H
ATOH	2125	CE	ARG	222	35.534	16.080	78.617	1.00	67.60	AAAA	C
ATOH	2126	HH1	ARG	222	34.925	16.599	77.533	1.00	70.26	AAAA	H
ATOH	2129	HH2	ARG	222	35.342	14.780	78.901	1.00	54.11	AAAA	H
ATOH	2132	C	ARG	222	39.562	19.286	75.740	1.00	50.66	AAAA	C
ATOH	2133	C	ARG	222	38.737	19.845	75.909	1.00	58.34	AAAA	O
ATOH	2134	H	HIS	223	40.555	19.981	76.190	1.00	45.65	AAAA	H
ATOH	2136	CA	HIS	223	40.998	21.291	75.821	1.00	46.95	AAAA	C
ATOH	2137	CB	HIS	223	41.057	22.251	77.921	1.00	49.51	AAAA	C
ATOH	2139	CG	HIS	223	39.710	22.344	77.617	1.00	58.83	AAAA	C
ATOH	2139	CD2	HIS	223	38.820	23.360	77.556	1.00	61.08	AAAA	C
ATOH	2140	HD1	HIS	223	39.082	21.380	78.425	1.00	63.28	AAAA	H
ATOH	2142	CE1	HIS	223	37.831	21.815	78.759	1.00	58.01	AAAA	C
ATOH	2143	HE2	HIS	223	37.691	23.019	78.232	1.00	48.56	AAAA	H
ATOH	2145	C	HIS	223	42.363	21.260	75.122	1.00	50.78	AAAA	C
ATOH	2146	C	HIS	223	42.506	20.753	74.003	1.00	47.43	AAAA	O
ATOH	2147	H	TYR	224	43.359	21.847	75.769	1.00	49.20	AAAA	H
ATOH	2149	CA	TYR	224	44.712	21.992	75.259	1.00	48.17	AAAA	C
ATOH	2150	CB	TYR	224	45.144	23.430	75.426	1.00	44.07	AAAA	C
ATOH	2151	CG	TYR	224	44.318	24.234	74.417	1.00	51.77	AAAA	C
ATOH	2152	CD1	TYR	224	43.193	24.869	74.904	1.00	48.94	AAAA	C
ATOH	2153	CE1	TYR	224	42.401	25.633	74.089	1.00	48.41	AAAA	C
ATOH	2154	CD2	TYR	224	44.623	24.358	73.065	1.00	54.82	AAAA	C
ATOH	2155	CE2	TYR	224	43.847	25.131	72.233	1.00	56.09	AAAA	C
ATOH	2156	CG	TYR	224	42.739	25.745	72.766	1.00	54.23	AAAA	C
ATOH	2157	OH	TYR	224	41.915	26.522	72.017	1.00	61.70	AAAA	O
ATOH	2159	C	TYR	224	45.725	21.095	75.892	1.00	48.19	AAAA	C
ATOH	2160	C	TYR	224	45.776	20.913	77.111	1.00	55.75	AAAA	O
ATOH	2161	H	TYR	225	46.584	20.514	75.677	1.00	48.79	AAAA	H
ATOH	2163	CA	TYR	225	47.655	19.653	75.555	1.00	43.92	AAAA	C
ATOH	2164	CB	TYR	225	48.020	18.639	74.548	1.00	42.32	AAAA	C
ATOH	2165	CG	TYR	225	49.286	17.926	74.954	1.00	46.95	AAAA	C
ATOH	2166	CD1	TYR	225	49.299	16.858	75.817	1.00	43.57	AAAA	C
ATOH	2167	CE1	TYR	225	50.450	16.221	76.173	1.00	47.26	AAAA	C
ATOH	2168	CD2	TYR	225	50.487	18.407	74.421	1.00	52.82	AAAA	C
ATOH	2169	CE2	TYR	225	51.656	17.791	74.781	1.00	53.94	AAAA	C
ATOH	2170	CG	TYR	225	51.639	16.707	75.644	1.00	52.31	AAAA	C
ATOH	2171	OH	TYR	225	52.906	16.196	75.995	1.00	50.71	AAAA	O
ATOH	2173	C	TYR	225	48.972	20.507	75.793	1.00	47.13	AAAA	C
ATOH	2174	O	TYR	225	49.080	21.214	75.150	1.00	53.97	AAAA	O
ATOH	2175	H	TYR	226	49.634	20.253	76.821	1.00	56.84	AAAA	H

005527-00004

22/58

ATOH	2177	CA	THR	226	50.811	21.001	77.172	1.00	56.63	AAAA	C
ATOH	2178	CB	THR	226	50.455	22.343	77.785	1.00	59.51	AAAA	C
ATOH	2179	CG	THR	226	51.741	23.126	77.941	1.00	65.45	AAAA	C
ATOH	2180	CD1	THR	226	52.121	23.557	79.197	1.00	69.12	AAAA	C
ATOH	2181	CE1	THR	226	53.289	24.275	79.400	1.00	70.77	AAAA	C
ATOH	2182	CE2	THR	226	52.580	23.409	76.864	1.00	69.38	AAAA	C
ATOH	2183	CE3	THR	226	53.758	24.118	77.020	1.00	70.94	AAAA	C
ATOH	2184	CH	THR	226	54.099	24.549	78.301	1.00	72.96	AAAA	C
ATOH	2185	CH	THR	226	55.267	25.254	78.435	1.00	70.84	AAAA	O
ATOH	2187	C	THR	226	51.784	20.356	78.165	1.00	57.55	AAAA	C
ATOH	2188	O	THR	226	51.492	20.133	79.350	1.00	56.90	AAAA	O
ATOH	2189	H	ALA	227	52.978	20.080	77.642	1.00	53.82	AAAA	H
ATOH	2191	CA	ALA	227	54.061	19.557	78.440	1.00	51.82	AAAA	C
ATOH	2192	CB	ALA	227	54.528	20.620	79.428	1.00	55.81	AAAA	C
ATOH	2193	C	ALA	227	53.600	19.309	79.170	1.00	53.56	AAAA	C
ATOH	2194	O	ALA	227	53.663	18.218	80.413	1.00	49.63	AAAA	O
ATOH	2195	H	GLY	228	53.076	17.360	78.393	1.00	50.68	AAAA	H
ATOH	2197	CA	GLY	228	52.585	16.135	79.028	1.00	49.02	AAAA	C
ATOH	2198	C	GLY	228	51.312	16.330	79.861	1.00	51.61	AAAA	C
ATOH	2199	O	GLY	228	51.028	15.838	80.776	1.00	51.10	AAAA	O
ATOH	2200	H	VAL	229	50.643	17.495	79.791	1.00	47.09	AAAA	H
ATOH	2202	CA	VAL	229	49.489	17.671	80.635	1.00	51.11	AAAA	C
ATOH	2203	CB	VAL	229	49.908	18.610	81.774	1.00	56.52	AAAA	C
ATOH	2204	CG1	VAL	229	48.627	18.896	82.566	1.00	38.39	AAAA	C
ATOH	2205	CG2	VAL	229	51.002	19.035	82.682	1.00	50.16	AAAA	C
ATOH	2206	C	VAL	229	48.255	19.173	79.873	1.00	51.37	AAAA	C
ATOH	2207	O	VAL	229	48.344	19.279	79.309	1.00	53.71	AAAA	O
ATOH	2208	H	CYS	230	47.100	17.518	80.036	1.00	42.21	AAAA	H
ATOH	2210	CA	CYS	230	45.891	18.117	79.471	1.00	40.32	AAAA	C
ATOH	2211	C	CYS	230	45.456	19.350	80.228	1.00	38.42	AAAA	C
ATOH	2212	O	CYS	230	44.964	19.248	81.321	1.00	41.62	AAAA	O
ATOH	2213	CB	CYS	230	44.746	17.132	79.370	1.00	31.54	AAAA	C
ATOH	2214	SG	CYS	230	45.149	15.753	78.266	1.00	43.61	AAAA	S
ATOH	2215	H	VAL	231	45.637	20.534	79.731	1.00	39.83	AAAA	H
ATOH	2217	CA	VAL	231	45.445	21.769	80.462	1.00	46.57	AAAA	C
ATOH	2218	CB	VAL	231	46.618	22.736	80.088	1.00	50.99	AAAA	C
ATOH	2219	CG1	VAL	231	46.798	23.878	81.053	1.00	50.41	AAAA	C
ATOH	2220	CG2	VAL	231	47.838	21.913	80.506	1.00	44.95	AAAA	C
ATOH	2221	C	VAL	231	44.111	22.321	80.057	1.00	52.59	AAAA	C
ATOH	2222	O	VAL	231	43.599	22.183	78.936	1.00	55.30	AAAA	O
ATOH	2223	H	PRO	232	43.482	23.105	80.913	1.00	54.28	AAAA	H
ATOH	2224	CD	PRO	232	43.830	23.385	82.320	1.00	54.25	AAAA	C
ATOH	2225	CA	PRO	232	42.153	23.625	80.575	1.00	54.39	AAAA	C
ATOH	2226	CB	PRO	232	41.537	23.877	81.928	1.00	53.73	AAAA	C
ATOH	2227	CG	PRO	232	42.683	24.287	82.765	1.00	55.00	AAAA	C
ATOH	2228	C	PRO	232	42.361	24.913	79.795	1.00	56.37	AAAA	C
ATOH	2229	O	PRO	232	41.498	25.482	79.137	1.00	55.79	AAAA	O
ATOH	2230	H	ALA	233	43.615	25.400	79.901	1.00	54.76	AAAA	H
ATOH	2232	CA	ALA	233	43.998	26.569	79.124	1.00	49.93	AAAA	C
ATOH	2233	CB	ALA	233	43.440	27.807	79.746	1.00	35.43	AAAA	C
ATOH	2234	C	ALA	233	45.502	26.662	78.974	1.00	49.79	AAAA	C
ATOH	2235	O	ALA	233	46.195	25.879	79.616	1.00	51.41	AAAA	O
ATOH	2236	H	CYS	234	45.984	27.508	78.072	1.00	45.07	AAAA	H
ATOH	2238	CA	CYS	234	47.430	27.518	77.907	1.00	48.63	AAAA	C
ATOH	2239	C	CYS	234	48.001	29.340	79.076	1.00	50.93	AAAA	C
ATOH	2240	O	CYS	234	47.650	29.513	79.250	1.00	47.57	AAAA	O
ATOH	2241	CB	CYS	234	47.816	28.034	76.511	1.00	43.10	AAAA	C
ATOH	2242	SG	CYS	234	47.608	26.789	75.226	1.00	43.04	AAAA	S
ATOH	2243	H	PRO	235	49.127	27.853	79.599	1.00	49.55	AAAA	H
ATOH	2244	CD	PRO	235	49.692	26.557	79.207	1.00	48.75	AAAA	C
ATOH	2245	CA	PRO	235	49.911	28.569	80.599	1.00	51.69	AAAA	C
ATOH	2246	CB	PRO	235	50.984	27.581	80.975	1.00	50.80	AAAA	C
ATOH	2247	CG	PRO	235	50.912	26.417	80.077	1.00	50.06	AAAA	C
ATOH	2248	C	PRO	235	50.487	29.852	80.050	1.00	57.11	AAAA	C
ATOH	2249	O	PRO	235	50.848	29.957	78.870	1.00	59.60	AAAA	O
ATOH	2250	H	PRO	236	50.676	30.875	80.887	1.00	59.05	AAAA	H
ATOH	2251	CD	PRO	236	50.405	30.822	82.363	1.00	55.85	AAAA	C
ATOH	2252	CA	PRO	236	51.323	32.143	80.493	1.00	52.27	AAAA	C
ATOH	2253	CB	PRO	236	51.695	32.814	81.826	1.00	53.62	AAAA	C
ATOH	2254	CG	PRO	236	50.652	32.277	82.751	1.00	56.73	AAAA	C
ATOH	2255	C	PRO	236	52.545	31.886	79.671	1.00	44.21	AAAA	C
ATOH	2256	O	PRO	236	53.219	30.892	79.928	1.00	43.40	AAAA	O
ATOH	2257	H	ASH	237	52.837	32.757	78.716	1.00	46.54	AAAA	H
ATOH	2259	CA	ASH	237	53.895	32.623	77.716	1.00	45.94	AAAA	C
ATOH	2260	CH	ASH	237	55.259	32.653	78.456	1.00	58.65	AAAA	C
ATOH	2261	CG	ASH	237	55.357	33.855	79.371	1.00	58.51	AAAA	C
ATOH	2262	OD1	ASH	237	56.044	33.783	80.379	1.00	72.25	AAAA	O
ATOH	2263	HD2	ASH	237	54.631	34.910	79.051	1.00	62.99	AAAA	H
ATOH	2266	C	ASH	237	53.897	31.425	76.788	1.00	46.87	AAAA	C
ATOH	2267	O	ASH	237	54.962	30.935	76.325	1.00	54.50	AAAA	O
ATOH	2268	H	THR	238	52.817	30.657	76.692	1.00	42.91	AAAA	H
ATOH	2270	CA	THR	239	52.617	29.567	75.790	1.00	40.20	AAAA	C
ATOH	2271	CB	THR	239	52.461	29.248	76.466	1.00	42.62	AAAA	C
ATOH	2272	CG1	THR	238	51.227	29.343	77.237	1.00	50.88	AAAA	O
ATOH	2274	CG2	THR	239	53.552	27.886	77.424	1.00	34.84	AAAA	C

0055275-00998

23/58

ATOH	2275	C	THR	238	51.273	29.875	75.078	1.00	42.59	AAAA	C
ATOH	2276	O	THR	238	50.669	30.864	75.509	1.00	42.51	AAAA	O
ATOH	2277	H	TYR	239	51.051	29.488	73.832	1.00	42.62	AAAA	H
ATOH	2279	CA	TYR	239	49.949	29.959	73.024	1.00	41.97	AAAA	C
ATOH	2280	CB	TYR	239	50.457	30.907	71.931	1.00	44.86	AAAA	C
ATOH	2281	CG	TYR	239	51.099	32.125	72.564	1.00	42.05	AAAA	C
ATOH	2282	CD1	TYR	239	52.467	32.086	72.815	1.00	39.41	AAAA	C
ATOH	2283	CE1	TYR	239	53.092	33.152	73.415	1.00	43.27	AAAA	C
ATOH	2284	CD2	TYR	239	50.376	33.230	72.923	1.00	44.15	AAAA	C
ATOH	2285	CE2	TYR	239	50.972	34.310	73.536	1.00	46.22	AAAA	C
ATOH	2286	CD	TYR	239	52.339	34.243	73.779	1.00	50.42	AAAA	C
ATOH	2287	OH	TYR	239	53.013	35.289	74.387	1.00	55.47	AAAA	O
ATOH	2289	C	TYR	239	49.232	28.813	72.315	1.00	45.54	AAAA	C
ATOH	2290	O	TYR	239	49.922	27.810	72.021	1.00	46.60	AAAA	O
ATOH	2291	H	ARG	240	47.895	28.990	72.126	1.00	40.62	AAAA	H
ATOH	2293	CA	ARG	240	47.177	27.892	71.423	1.00	38.78	AAAA	C
ATOH	2294	CB	ARG	240	45.675	28.127	71.452	1.00	39.77	AAAA	C
ATOH	2295	CG	ARG	240	45.115	28.944	72.589	1.00	43.37	AAAA	C
ATOH	2296	CD	ARG	240	43.573	28.957	72.683	1.00	39.60	AAAA	C
ATOH	2297	HE	ARG	240	43.114	29.683	71.455	1.00	53.95	AAAA	H
ATOH	2299	CG	ARG	240	43.123	31.015	71.530	1.00	48.07	AAAA	C
ATOH	2300	IHH1	ARG	240	43.513	31.562	72.668	1.00	47.65	AAAA	H
ATOH	2303	IHH2	ARG	240	42.788	31.779	70.533	1.00	51.03	AAAA	H
ATOH	2306	C	ARG	240	47.627	27.737	69.979	1.00	31.72	AAAA	C
ATOH	2307	O	ARG	240	47.937	28.730	69.302	1.00	32.37	AAAA	O
ATOH	2308	H	PHE	241	47.779	26.542	69.549	1.00	27.95	AAAA	H
ATOH	2310	CA	PHE	241	48.182	26.269	68.183	1.00	30.41	AAAA	C
ATOH	2311	CB	PHE	241	49.678	25.940	68.151	1.00	34.83	AAAA	C
ATOH	2312	CG	PHE	241	50.235	25.653	66.773	1.00	26.84	AAAA	C
ATOH	2313	CD1	PHE	241	50.165	26.567	65.753	1.00	25.31	AAAA	C
ATOH	2314	CD2	PHE	241	50.785	24.417	66.573	1.00	27.38	AAAA	C
ATOH	2315	CE1	PHE	241	50.676	26.232	64.509	1.00	37.24	AAAA	C
ATOH	2316	CE2	PHE	241	51.294	24.101	65.320	1.00	38.45	AAAA	C
ATOH	2317	CE	PHE	241	51.281	25.010	64.291	1.00	21.17	AAAA	C
ATOH	2318	C	PHE	241	47.382	25.089	67.621	1.00	35.77	AAAA	C
ATOH	2319	O	PHE	241	47.543	24.013	68.186	1.00	36.77	AAAA	O
ATOH	2320	H	GLU	242	46.738	25.301	66.468	1.00	32.30	AAAA	H
ATOH	2322	CA	GLU	242	45.964	24.269	65.805	1.00	35.43	AAAA	C
ATOH	2323	CB	GLU	242	46.953	23.144	65.472	1.00	37.98	AAAA	C
ATOH	2324	CG	GLU	242	47.867	23.415	64.314	1.00	38.63	AAAA	C
ATOH	2325	CD	GLU	242	47.207	23.965	63.075	1.00	39.27	AAAA	C
ATOH	2326	OE1	GLU	242	46.380	23.205	62.517	1.00	42.79	AAAA	O
ATOH	2327	OE2	GLU	242	47.354	25.109	62.626	1.00	36.36	AAAA	O
ATOH	2328	C	GLU	242	44.752	23.771	66.600	1.00	34.36	AAAA	C
ATOH	2329	O	GLU	242	44.390	22.611	66.511	1.00	28.53	AAAA	O
ATOH	2330	H	GLY	243	44.135	24.589	67.449	1.00	36.94	AAAA	H
ATOH	2332	CA	GLY	243	43.048	24.154	68.303	1.00	34.57	AAAA	C
ATOH	2333	C	GLY	243	43.428	23.107	69.319	1.00	37.76	AAAA	C
ATOH	2334	O	GLY	243	42.474	22.473	69.746	1.00	43.00	AAAA	O
ATOH	2335	H	TRP	244	44.637	22.636	69.611	1.00	39.53	AAAA	H
ATOH	2337	CA	TRP	244	44.797	21.536	70.566	1.00	40.85	AAAA	C
ATOH	2338	CB	TRP	244	44.774	20.271	69.764	1.00	26.76	AAAA	C
ATOH	2339	CG	TRP	244	46.012	19.885	69.029	1.00	43.19	AAAA	C
ATOH	2340	CD2	TRP	244	47.019	18.983	69.498	1.00	39.55	AAAA	C
ATOH	2341	CE2	TRP	244	47.998	19.906	68.489	1.00	36.50	AAAA	C
ATOH	2342	CE3	TRP	244	47.186	18.254	70.692	1.00	32.18	AAAA	C
ATOH	2343	CD1	TRP	244	46.424	20.308	67.779	1.00	43.37	AAAA	C
ATOH	2344	IHE1	TRP	244	47.595	19.727	67.469	1.00	38.89	AAAA	H
ATOH	2346	CE2	TRP	244	49.150	18.128	68.620	1.00	39.01	AAAA	C
ATOH	2347	CE3	TRP	244	48.335	17.478	70.815	1.00	43.98	AAAA	C
ATOH	2348	CH2	TRP	244	49.322	17.425	69.794	1.00	42.50	AAAA	C
ATOH	2349	C	TRP	244	45.998	21.517	71.509	1.00	42.98	AAAA	C
ATOH	2350	O	TRP	244	46.253	20.501	72.146	1.00	42.70	AAAA	O
ATOH	2351	H	ARG	245	46.888	22.485	71.135	1.00	44.16	AAAA	H
ATOH	2353	CA	ARG	245	48.169	22.472	72.095	1.00	46.47	AAAA	C
ATOH	2354	CB	ARG	245	49.203	21.602	71.367	1.00	47.30	AAAA	C
ATOH	2355	CG	ARG	245	49.985	22.309	70.203	1.00	48.97	AAAA	C
ATOH	2356	CD	ARG	245	51.129	21.552	69.819	1.00	39.29	AAAA	C
ATOH	2357	HE	ARG	245	51.586	21.665	68.444	1.00	50.86	AAAA	H
ATOH	2359	CE	ARG	245	52.629	21.044	67.895	1.00	46.73	AAAA	C
ATOH	2360	IHH1	ARG	245	53.344	20.236	68.653	1.00	50.15	AAAA	H
ATOH	2363	IHH2	ARG	245	53.072	21.126	66.638	1.00	41.69	AAAA	H
ATOH	2366	C	ARG	245	48.771	23.863	72.271	1.00	46.01	AAAA	C
ATOH	2367	O	ARG	245	48.394	24.793	71.541	1.00	47.44	AAAA	O
ATOH	2368	H	CYS	246	49.825	23.881	73.317	1.00	42.08	AAAA	H
ATOH	2370	CA	CYS	246	50.246	25.199	73.628	1.00	43.48	AAAA	C
ATOH	2371	C	CYS	246	51.695	25.217	73.183	1.00	43.38	AAAA	C
ATOH	2372	O	CYS	246	52.476	24.239	73.320	1.00	42.51	AAAA	O
ATOH	2373	CB	CYS	246	50.102	25.392	75.138	1.00	48.91	AAAA	C
ATOH	2374	SG	CYS	246	48.386	25.049	75.797	1.00	43.68	AAAA	S
ATOH	2375	H	VAL	247	52.121	26.288	72.564	1.00	41.21	AAAA	H
ATOH	2377	CA	VAL	247	53.417	26.468	71.982	1.00	36.51	AAAA	C
ATOH	2379	CB	VAL	247	53.569	26.357	70.444	1.00	36.87	AAAA	C
ATOH	2379	CG1	VAL	247	53.089	24.988	70.024	1.00	32.71	AAAA	C
ATOH	2380	CG2	VAL	247	53.129	27.602	69.729	1.00	28.20	AAAA	C

PCT/555275

24/58

ATOH	2381	C	VAL	247	53.969	27.812	72.575	1.00	38.37	AAAA	C
ATOH	2382	O	VAL	247	53.230	28.770	72.546	1.00	38.80	AAAA	O
ATOH	2383	H	ASP	248	55.291	27.820	72.711	1.00	45.21	AAAA	H
ATOH	2385	CA	ASP	248	55.895	29.115	73.098	1.00	40.19	AAAA	C
ATOH	2386	CB	ASP	248	57.091	28.946	73.953	1.00	42.63	AAAA	C
ATOH	2387	CG	ASP	248	58.126	27.997	73.394	1.00	58.81	AAAA	C
ATOH	2388	OD1	ASP	248	59.067	27.795	74.187	1.00	53.06	AAAA	O
ATOH	2389	OD2	ASP	248	58.167	27.395	72.313	1.00	69.51	AAAA	O
ATOH	2390	C	ASP	248	56.315	29.883	71.839	1.00	36.99	AAAA	C
ATOH	2391	O	ASP	248	56.292	29.288	70.772	1.00	39.70	AAAA	O
ATOH	2392	H	ARG	249	56.545	31.163	71.218	1.00	30.72	AAAA	H
ATOH	2394	CA	ARG	249	56.950	32.057	70.906	1.00	36.17	AAAA	C
ATOH	2395	CB	ARG	249	57.223	33.495	71.491	1.00	21.22	AAAA	C
ATOH	2396	CG	ARG	249	57.594	34.424	70.326	1.00	24.96	AAAA	C
ATOH	2397	CD	ARG	249	57.814	35.811	70.843	1.00	21.23	AAAA	C
ATOH	2398	HE	ARG	249	56.658	36.150	71.689	1.00	39.75	AAAA	H
ATOH	2400	CD	ARG	249	55.632	36.823	71.101	1.00	39.35	AAAA	C
ATOH	2401	HE1	ARG	249	55.642	37.118	69.801	1.00	25.41	AAAA	H
ATOH	2404	HE2	ARG	249	54.641	37.118	71.945	1.00	44.04	AAAA	H
ATOH	2407	C	ARG	249	58.134	31.685	70.010	1.00	40.63	AAAA	C
ATOH	2408	O	ARG	249	58.086	31.223	68.707	1.00	44.79	AAAA	O
ATOH	2409	H	ASP	250	59.149	30.974	70.468	1.00	41.87	AAAA	H
ATOH	2411	CA	ASP	250	60.287	30.739	69.606	1.00	46.90	AAAA	C
ATOH	2412	CB	ASP	250	61.740	30.726	70.154	1.00	53.11	AAAA	C
ATOH	2413	CG	ASP	250	62.421	32.122	70.081	1.00	71.49	AAAA	C
ATOH	2414	OD1	ASP	250	63.124	32.682	69.176	1.00	58.53	AAAA	O
ATOH	2415	OD2	ASP	250	62.272	32.928	71.071	1.00	70.30	AAAA	O
ATOH	2416	C	ASP	250	59.881	29.536	68.771	1.00	41.22	AAAA	C
ATOH	2417	O	ASP	250	60.291	29.443	67.616	1.00	39.06	AAAA	O
ATOH	2418	H	PHE	251	59.116	29.609	69.229	1.00	36.13	AAAA	H
ATOH	2420	CA	PHE	251	58.457	27.601	68.489	1.00	34.88	AAAA	C
ATOH	2421	CB	PHE	251	57.468	26.746	69.256	1.00	29.82	AAAA	C
ATOH	2422	CG	PHE	251	56.701	25.801	68.385	1.00	41.50	AAAA	C
ATOH	2423	CD1	PHE	251	57.101	24.479	68.263	1.00	30.66	AAAA	C
ATOH	2424	CD2	PHE	251	55.559	26.213	67.686	1.00	37.78	AAAA	C
ATOH	2425	CE1	PHE	251	56.414	23.597	67.424	1.00	29.30	AAAA	C
ATOH	2426	CE2	PHE	251	54.847	25.372	66.856	1.00	36.09	AAAA	C
ATOH	2427	CC	PHE	251	55.294	24.070	66.715	1.00	36.21	AAAA	C
ATOH	2428	C	PHE	251	57.624	28.290	67.338	1.00	39.28	AAAA	C
ATOH	2429	O	PHE	251	57.811	28.010	66.144	1.00	30.27	AAAA	O
ATOH	2430	H	CYS	252	56.734	29.225	67.713	1.00	35.13	AAAA	H
ATOH	2432	CA	CYS	252	55.895	29.870	66.728	1.00	38.80	AAAA	C
ATOH	2433	C	CYS	252	56.827	30.598	65.747	1.00	44.73	AAAA	C
ATOH	2434	O	CYS	252	56.552	30.534	64.536	1.00	43.20	AAAA	O
ATOH	2435	CB	CYS	252	54.903	30.778	67.379	1.00	35.65	AAAA	C
ATOH	2436	SG	CYS	252	53.562	21.544	66.459	1.00	39.03	AAAA	S
ATOH	2437	H	ALA	253	57.872	31.256	66.285	1.00	41.53	AAAA	H
ATOH	2439	CA	ALA	253	58.687	32.071	65.415	1.00	40.39	AAAA	C
ATOH	2440	CB	ALA	253	59.529	33.089	66.172	1.00	36.07	AAAA	C
ATOH	2441	C	ALA	253	59.551	31.167	64.539	1.00	42.88	AAAA	C
ATOH	2442	O	ALA	253	60.147	31.735	63.640	1.00	47.42	AAAA	O
ATOH	2443	H	ASU	254	59.657	29.859	64.709	1.00	38.75	AAAA	H
ATOH	2445	CA	ASU	254	60.546	29.073	63.929	1.00	42.94	AAAA	C
ATOH	2446	CB	ASU	254	61.667	28.497	64.847	1.00	48.09	AAAA	C
ATOH	2447	CG	ASU	254	62.696	29.635	65.031	1.00	49.54	AAAA	C
ATOH	2448	OD1	ASU	254	63.468	29.840	64.081	1.00	61.38	AAAA	O
ATOH	2449	ND2	ASU	254	62.607	30.321	66.144	1.00	48.38	AAAA	H
ATOH	2452	C	ASU	254	59.907	27.959	63.135	1.00	53.72	AAAA	C
ATOH	2453	O	ASU	254	60.552	26.965	62.804	1.00	51.19	AAAA	O
ATOH	2454	H	ILE	255	58.612	28.136	62.766	1.00	57.77	AAAA	H
ATOH	2456	CA	ILE	255	57.829	27.107	62.134	1.00	53.29	AAAA	C
ATOH	2457	CB	ILE	255	56.329	27.322	62.304	1.00	50.41	AAAA	C
ATOH	2458	CG2	ILE	255	55.477	26.595	61.246	1.00	51.95	AAAA	C
ATOH	2459	CG1	ILE	255	55.778	26.675	63.553	1.00	40.59	AAAA	C
ATOH	2460	CD1	ILE	255	54.479	27.317	64.006	1.00	38.97	AAAA	C
ATOH	2461	C	ILE	255	58.127	26.886	60.651	1.00	52.62	AAAA	C
ATOH	2462	O	ILE	255	58.196	25.709	60.252	1.00	53.96	AAAA	O
ATOH	2463	H	LEU	256	58.290	27.960	59.918	1.00	49.96	AAAA	H
ATOH	2465	CA	LEU	256	58.680	27.764	58.516	1.00	63.68	AAAA	C
ATOH	2466	CB	LEU	256	58.175	29.012	57.799	1.00	56.80	AAAA	C
ATOH	2467	CG	LEU	256	56.671	29.196	57.864	1.00	59.11	AAAA	C
ATOH	2468	CD1	LEU	256	56.310	30.654	57.645	1.00	43.31	AAAA	C
ATOH	2469	CD2	LEU	256	55.965	29.222	56.929	1.00	55.88	AAAA	C
ATOH	2470	C	LEU	256	60.193	27.622	58.355	1.00	66.23	AAAA	C
ATOH	2471	O	LEU	256	60.691	27.511	57.245	1.00	70.29	AAAA	O
ATOH	2472	H	SER	257	60.942	27.559	59.430	1.00	64.61	AAAA	H
ATOH	2474	CA	SER	257	62.352	27.529	59.534	1.00	69.23	AAAA	C
ATOH	2475	CB	SER	257	62.924	27.318	60.955	1.00	62.45	AAAA	C
ATOH	2476	OG	SER	257	63.381	25.990	61.074	1.00	56.18	AAAA	O
ATOH	2478	C	SER	257	62.973	26.497	58.610	1.00	70.77	AAAA	C
ATOH	2479	O	SER	257	64.127	26.731	59.246	1.00	72.50	AAAA	O
ATOH	2480	H	ALA	258	62.322	25.399	58.329	1.00	74.61	AAAA	H
ATOH	2482	CA	ALA	258	62.933	24.488	57.313	1.00	76.34	AAAA	C
ATOH	2483	CB	ALA	258	62.570	23.039	57.584	1.00	80.82	AAAA	C
ATOH	2484	C	ALA	258	62.663	24.964	55.921	1.00	78.21	AAAA	C

PCT/555275



25/58

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AT01	2485	O	ALA	259	62.980	24.130	55.020	1.00	70.60	AAAA	O
AT01	2486	H	GLU	259	62.969	26.109	55.651	1.00	79.05	AAAA	H
AT01	2489	CA	GLU	259	61.742	26.621	54.340	1.00	83.84	AAAA	C
AT01	2489	CB	GLU	259	60.225	26.457	54.135	1.00	86.99	AAAA	C
AT01	2490	CG	GLU	259	59.687	25.949	54.314	1.00	99.38	AAAA	C
AT01	2491	CD	GLU	259	58.364	25.032	55.057	1.00	97.77	AAAA	C
AT01	2492	OE1	GLU	259	58.080	24.088	55.839	1.00	101.45	AAAA	O
AT01	2493	OE2	GLU	259	57.599	26.002	54.837	1.00	94.58	AAAA	O
AT01	2494	C	GLU	259	62.117	28.078	54.083	1.00	85.43	AAAA	C
AT01	2495	O	GLU	259	62.059	29.009	54.903	1.00	88.01	AAAA	O
AT01	2496	H	SER	260	62.229	28.338	52.799	1.00	84.66	AAAA	H
AT01	2498	CA	SER	260	62.725	29.625	52.254	1.00	84.03	AAAA	C
AT01	2499	CB	SER	260	63.753	29.269	51.173	1.00	87.24	AAAA	C
AT01	2500	CG	SER	260	63.306	29.419	49.835	1.00	93.65	AAAA	O
AT01	2502	C	SER	260	61.558	30.466	51.789	1.00	80.84	AAAA	C
AT01	2503	O	SER	260	61.496	30.889	50.635	1.00	81.31	AAAA	O
AT01	2504	H	SER	261	60.617	30.785	52.685	1.00	78.56	AAAA	H
AT01	2506	CA	SER	261	59.423	31.540	52.308	1.00	72.13	AAAA	C
AT01	2507	CB	SER	261	58.179	31.297	53.170	1.00	67.30	AAAA	C
AT01	2508	CG	SER	261	57.436	30.334	52.451	1.00	74.74	AAAA	C
AT01	2510	C	SER	261	59.683	33.032	52.318	1.00	66.90	AAAA	C
AT01	2511	O	SER	261	60.046	33.588	53.334	1.00	63.24	AAAA	O
AT01	2512	H	ASP	262	59.364	33.659	51.264	1.00	65.30	AAAA	H
AT01	2514	CA	ASP	262	59.358	35.071	50.915	1.00	58.55	AAAA	C
AT01	2515	CB	ASP	262	59.268	35.285	49.400	1.00	64.85	AAAA	C
AT01	2516	CG	ASP	262	59.389	36.713	48.931	1.00	76.42	AAAA	C
AT01	2517	OD1	ASP	262	59.473	37.708	49.701	1.00	79.81	AAAA	O
AT01	2518	OD2	ASP	262	59.404	36.873	47.671	1.00	80.46	AAAA	O
AT01	2519	C	ASP	262	58.121	35.706	51.529	1.00	56.88	AAAA	C
AT01	2520	O	ASP	262	57.851	36.919	51.510	1.00	52.49	AAAA	O
AT01	2521	H	SER	263	57.259	34.849	52.119	1.00	53.43	AAAA	H
AT01	2523	CA	SER	263	56.047	35.352	52.734	1.00	52.84	AAAA	C
AT01	2524	CB	SER	263	55.020	34.245	52.985	1.00	46.60	AAAA	C
AT01	2525	CG	SER	263	55.149	33.348	51.791	1.00	66.80	AAAA	O
AT01	2527	C	SER	263	56.310	35.965	54.117	1.00	49.52	AAAA	C
AT01	2528	O	SER	263	57.396	35.737	54.709	1.00	42.33	AAAA	O
AT01	2529	H	GLU	264	55.320	36.783	54.540	1.00	38.93	AAAA	H
AT01	2531	CA	GLU	264	55.362	37.222	55.921	1.00	36.70	AAAA	C
AT01	2532	CB	GLU	264	54.359	38.337	56.208	1.00	43.71	AAAA	C
AT01	2533	CG	GLU	264	54.575	39.482	55.219	1.00	37.74	AAAA	C
AT01	2534	CD	GLU	264	55.374	40.632	55.793	1.00	34.36	AAAA	C
AT01	2535	OE1	GLU	264	55.493	40.600	57.034	1.00	41.55	AAAA	O
AT01	2536	OE2	GLU	264	55.832	41.576	55.146	1.00	39.60	AAAA	O
AT01	2537	C	GLU	264	55.098	36.056	56.827	1.00	35.84	AAAA	C
AT01	2538	O	GLU	264	54.368	35.151	56.355	1.00	39.60	AAAA	O
AT01	2539	H	GLY	265	55.801	35.938	57.962	1.00	35.64	AAAA	H
AT01	2541	CA	GLY	265	55.671	34.690	58.727	1.00	40.30	AAAA	C
AT01	2542	C	GLY	265	54.622	34.716	59.829	1.00	39.51	AAAA	C
AT01	2543	O	GLY	265	53.951	35.699	60.135	1.00	37.20	AAAA	O
AT01	2544	H	PHE	266	54.537	33.569	60.516	1.00	35.75	AAAA	H
AT01	2546	CA	PHE	266	53.637	33.434	61.625	1.00	33.70	AAAA	C
AT01	2547	CB	PHE	266	53.924	32.155	62.396	1.00	28.20	AAAA	C
AT01	2548	CG	PHE	266	53.356	30.958	61.671	1.00	37.07	AAAA	C
AT01	2549	CD1	PHE	266	53.760	30.618	60.377	1.00	34.72	AAAA	C
AT01	2550	CD2	PHE	266	52.383	30.185	62.313	1.00	25.65	AAAA	C
AT01	2551	OE1	PHE	266	53.225	29.506	59.760	1.00	37.72	AAAA	C
AT01	2552	OE2	PHE	266	51.879	29.094	61.672	1.00	24.63	AAAA	C
AT01	2553	CB	PHE	266	52.260	28.708	60.402	1.00	23.59	AAAA	C
AT01	2554	C	PHE	266	53.571	34.570	62.608	1.00	35.82	AAAA	C
AT01	2555	O	PHE	266	54.446	35.372	62.979	1.00	30.23	AAAA	O
AT01	2556	H	VAL	267	52.360	31.763	63.161	1.00	37.10	AAAA	H
AT01	2558	CA	VAL	267	52.118	35.812	64.113	1.00	36.09	AAAA	C
AT01	2559	CB	VAL	267	51.315	36.974	63.567	1.00	39.01	AAAA	C
AT01	2560	CG1	VAL	267	51.526	37.601	62.220	1.00	31.16	AAAA	C
AT01	2561	CG2	VAL	267	49.990	36.400	63.570	1.00	36.88	AAAA	C
AT01	2562	C	VAL	267	51.506	35.260	65.409	1.00	33.55	AAAA	C
AT01	2563	O	VAL	267	51.202	34.098	65.515	1.00	32.41	AAAA	O
AT01	2564	H	ILE	268	51.539	36.088	66.477	1.00	35.98	AAAA	H
AT01	2566	CA	ILE	268	50.867	35.573	67.681	1.00	39.79	AAAA	C
AT01	2567	CB	ILE	268	51.791	35.232	68.849	1.00	31.17	AAAA	C
AT01	2568	CG2	ILE	268	50.922	35.253	70.150	1.00	32.66	AAAA	C
AT01	2569	CG1	ILE	268	52.402	33.866	68.724	1.00	23.56	AAAA	C
AT01	2570	CD1	ILE	268	53.421	33.546	69.806	1.00	25.93	AAAA	C
AT01	2571	C	ILE	268	49.906	36.608	68.060	1.00	42.44	AAAA	C
AT01	2572	O	ILE	268	50.116	37.767	68.327	1.00	39.99	AAAA	O
AT01	2573	H	HIS	269	48.528	36.292	67.864	1.00	44.26	AAAA	H
AT01	2575	CA	HIS	269	47.491	37.320	68.173	1.00	44.28	AAAA	C
AT01	2576	CB	HIS	269	46.889	37.876	66.901	1.00	45.48	AAAA	C
AT01	2577	CG	HIS	269	45.915	39.986	67.079	1.00	54.33	AAAA	C
AT01	2578	CD2	HIS	269	44.551	39.014	67.098	1.00	46.61	AAAA	C
AT01	2579	HD1	HIS	269	46.356	40.290	67.307	1.00	51.86	AAAA	H
AT01	2591	CE1	HIS	269	45.202	41.057	67.437	1.00	55.17	AAAA	C
AT01	2592	HE2	HIS	269	44.175	40.314	67.309	1.00	46.97	AAAA	H
AT01	2584	C	HIS	269	48.423	36.740	69.074	1.00	45.54	AAAA	C
AT01	2595	O	HIS	269	46.076	35.952	69.117	1.00	42.94	AAAA	O

26/58

ATOH	2596	H	ASP	270	45.952	37.526	70.959	1.00	40.92	AAAA	H
ATOH	2588	CA	ASP	270	44.948	37.625	71.001	1.00	48.03	AAAA	C
ATOH	2589	CB	ASP	270	43.573	37.014	70.339	1.00	63.63	AAAA	C
ATOH	2590	CG	ASP	270	42.919	38.393	70.294	1.00	80.82	AAAA	C
ATOH	2591	OD1	ASP	270	41.737	38.379	69.835	1.00	90.92	AAAA	O
ATOH	2592	OD2	ASP	270	43.407	39.494	70.652	1.00	86.49	AAAA	O
ATOH	2593	C	ASP	270	45.226	35.667	71.594	1.00	44.66	AAAA	C
ATOH	2594	O	ASP	270	44.357	34.782	71.576	1.00	45.54	AAAA	O
ATOH	2595	H	GLY	271	46.477	35.379	71.924	1.00	41.63	AAAA	H
ATOH	2597	CA	GLY	271	46.839	34.117	72.506	1.00	37.20	AAAA	C
ATOH	2598	C	GLY	271	46.819	32.998	71.537	1.00	39.15	AAAA	C
ATOH	2599	O	GLY	271	46.775	31.865	72.039	1.00	46.56	AAAA	O
ATOH	2600	H	GLU	272	47.015	33.292	70.251	1.00	41.49	AAAA	H
ATOH	2602	CA	GLU	272	47.109	32.092	69.371	1.00	43.56	AAAA	C
ATOH	2603	CB	GLU	272	45.752	31.737	68.876	1.00	37.58	AAAA	C
ATOH	2604	CG	GLU	272	45.779	30.600	67.839	1.00	45.30	AAAA	C
ATOH	2605	CD	GLU	272	44.413	30.528	67.149	1.00	36.92	AAAA	C
ATOH	2606	OE1	GLU	272	43.515	31.345	67.533	1.00	48.41	AAAA	O
ATOH	2607	OE2	GLU	272	44.223	29.696	66.296	1.00	44.10	AAAA	O
ATOH	2608	C	GLU	272	48.211	32.324	68.335	1.00	40.32	AAAA	C
ATOH	2609	O	GLU	272	48.445	33.447	67.896	1.00	37.04	AAAA	O
ATOH	2610	H	CYS	273	48.942	31.237	68.138	1.00	38.83	AAAA	H
ATOH	2612	CA	CYS	273	50.046	31.187	67.108	1.00	40.27	AAAA	C
ATOH	2613	C	CYS	273	49.321	30.810	65.883	1.00	42.16	AAAA	C
ATOH	2614	O	CYS	273	48.713	29.712	65.831	1.00	40.86	AAAA	O
ATOH	2615	CB	CYS	273	51.099	30.148	67.522	1.00	40.21	AAAA	C
ATOH	2616	SG	CYS	273	52.337	29.825	66.260	1.00	39.79	AAAA	S
ATOH	2617	H	HET	274	49.373	31.749	64.933	1.00	33.70	AAAA	H
ATOH	2619	CA	HET	274	48.586	31.351	63.720	1.00	36.68	AAAA	C
ATOH	2620	CB	HET	274	47.136	31.861	63.847	1.00	29.11	AAAA	C
ATOH	2621	CG	HET	274	46.923	33.379	63.691	1.00	36.51	AAAA	C
ATOH	2622	SD	HET	274	45.477	33.921	64.677	1.00	40.00	AAAA	S
ATOH	2623	CE	HET	274	45.659	35.658	64.754	1.00	22.47	AAAA	C
ATOH	2624	C	HET	274	49.426	31.900	62.608	1.00	39.35	AAAA	O
ATOH	2625	O	HET	274	50.167	32.880	62.672	1.00	41.00	AAAA	O
ATOH	2626	H	GLN	275	49.378	31.353	61.408	1.00	42.55	AAAA	H
ATOH	2628	CA	GLN	275	50.041	31.834	60.232	1.00	37.69	AAAA	C
ATOH	2629	CB	GLN	275	49.618	30.765	59.242	1.00	34.01	AAAA	C
ATOH	2630	CG	GLN	275	49.329	31.274	57.864	1.00	56.40	AAAA	C
ATOH	2631	CD	GLN	275	49.275	30.190	56.812	1.00	66.46	AAAA	C
ATOH	2632	OE1	GLN	275	49.941	29.151	56.910	1.00	67.24	AAAA	O
ATOH	2633	HE2	GLN	275	48.451	30.436	55.799	1.00	78.29	AAAA	H
ATOH	2636	C	GLN	275	49.721	33.195	59.720	1.00	35.41	AAAA	C
ATOH	2637	O	GLN	275	50.526	33.831	59.064	1.00	35.95	AAAA	O
ATOH	2638	H	GLU	276	48.566	33.754	60.056	1.00	41.70	AAAA	H
ATOH	2640	CA	GLU	276	48.222	35.080	59.571	1.00	43.96	AAAA	C
ATOH	2641	CB	GLU	276	47.387	34.884	58.245	1.00	42.40	AAAA	C
ATOH	2642	CG	GLU	276	47.154	36.269	57.650	1.00	53.84	AAAA	C
ATOH	2643	CD	GLU	276	48.359	37.199	57.460	1.00	61.37	AAAA	C
ATOH	2644	OE1	GLU	276	49.356	36.595	56.943	1.00	67.32	AAAA	O
ATOH	2645	OE2	GLU	276	48.242	38.411	57.811	1.00	45.10	AAAA	C
ATOH	2646	C	GLU	276	47.444	35.935	60.540	1.00	32.74	AAAA	C
ATOH	2647	O	GLU	276	46.760	35.449	61.444	1.00	45.06	AAAA	O
ATOH	2648	H	CYS	277	47.495	37.235	60.500	1.00	38.69	AAAA	H
ATOH	2650	CA	CYS	277	46.718	38.089	61.332	1.00	46.11	AAAA	C
ATOH	2651	C	CYS	277	45.205	37.938	60.924	1.00	52.70	AAAA	C
ATOH	2652	O	CYS	277	44.760	37.511	59.936	1.00	49.43	AAAA	O
ATOH	2653	CB	CYS	277	47.039	39.537	61.111	1.00	45.56	AAAA	C
ATOH	2654	SG	CYS	277	48.629	40.083	61.645	1.00	52.86	AAAA	S
ATOH	2655	H	PRO	278	44.380	38.261	61.993	1.00	54.63	AAAA	H
ATOH	2656	CD	PRO	278	44.824	38.778	63.311	1.00	57.20	AAAA	C
ATOH	2657	CA	PRO	278	42.946	38.185	61.899	1.00	55.82	AAAA	C
ATOH	2658	CB	PRO	278	42.445	38.635	63.267	1.00	55.61	AAAA	C
ATOH	2659	CG	PRO	278	43.605	38.670	64.153	1.00	55.58	AAAA	C
ATOH	2660	C	PRO	278	42.487	39.116	60.781	1.00	52.55	AAAA	C
ATOH	2661	O	PRO	278	43.083	40.195	60.631	1.00	48.76	AAAA	O
ATOH	2662	H	SER	279	41.370	38.845	60.143	1.00	49.35	AAAA	H
ATOH	2664	CA	SER	279	40.915	39.720	59.140	1.00	52.03	AAAA	C
ATOH	2665	CB	SER	279	39.290	39.572	58.975	1.00	47.62	AAAA	C
ATOH	2666	CG	SER	279	39.320	38.779	57.785	1.00	68.16	AAAA	O
ATOH	2668	C	SER	279	41.003	41.209	59.173	1.00	55.40	AAAA	C
ATOH	2669	O	SER	279	41.226	41.740	58.059	1.00	55.40	AAAA	O
ATOH	2670	H	GLY	280	46.775	41.962	60.247	1.00	55.32	AAAA	H
ATOH	2672	CA	GLY	280	40.968	43.406	59.868	1.00	48.58	AAAA	C
ATOH	2673	C	GLY	280	42.248	43.890	60.479	1.00	55.98	AAAA	C
ATOH	2674	O	GLY	280	42.249	45.097	60.772	1.00	56.00	AAAA	O
ATOH	2675	H	PHE	281	43.213	42.983	60.742	1.00	55.42	AAAA	H
ATOH	2677	CA	PHE	281	44.506	43.411	61.262	1.00	52.94	AAAA	C
ATOH	2678	CB	PHE	281	44.939	42.644	62.523	1.00	61.20	AAAA	C
ATOH	2679	CG	PHE	281	43.959	42.792	63.637	1.00	53.66	AAAA	C
ATOH	2680	CD1	PHE	281	44.142	43.702	64.630	1.00	60.47	AAAA	C
ATOH	2681	CD2	PHE	281	42.929	41.992	63.712	1.00	60.02	AAAA	C
ATOH	2682	CE1	PHE	281	43.272	43.901	65.678	1.00	64.71	AAAA	C
ATOH	2683	CE2	PHE	281	41.931	42.162	64.755	1.00	63.19	AAAA	C
ATOH	2684	CC	PHE	281	42.141	43.115	65.744	1.00	58.88	AAAA	C

27/58

ATOM	2685	H	PHE	281	45.530	43.217	59.249	1.00	48.00	AAAA	C
ATOM	2686	O	PHE	281	45.738	42.395	59.327	1.00	38.84	AAAA	O
ATOM	2687	H	ILE	282	45.670	43.990	60.557	1.00	49.55	AAAA	H
ATOM	2689	CA	ILE	282	47.957	43.981	59.748	1.00	45.00	AAAA	C
ATOM	2690	CB	ILE	282	47.945	45.188	58.799	1.00	30.25	AAAA	C
ATOM	2691	CG2	ILE	282	48.341	46.494	59.507	1.00	24.60	AAAA	C
ATOM	2692	CG1	ILE	282	49.092	45.022	57.795	1.00	38.71	AAAA	C
ATOM	2693	CD1	ILE	282	49.194	45.043	56.669	1.00	33.38	AAAA	C
ATOM	2694	C	ILE	282	49.981	43.889	60.673	1.00	44.30	AAAA	C
ATOM	2695	O	ILE	282	49.979	44.447	61.759	1.00	48.49	AAAA	O
ATOM	2696	H	ARG	283	50.126	43.153	60.298	1.00	48.68	AAAA	H
ATOM	2698	CA	ARG	283	51.396	43.094	61.048	1.00	39.30	AAAA	C
ATOM	2699	CB	ARG	283	52.300	42.200	60.286	1.00	41.10	AAAA	C
ATOM	2700	CG	ARG	283	52.295	40.696	60.515	1.00	29.19	AAAA	C
ATOM	2701	CD	ARG	283	53.078	39.986	59.451	1.00	29.85	AAAA	C
ATOM	2702	HE	ARG	283	52.923	38.545	59.404	1.00	29.39	AAAA	H
ATOM	2704	CG	ARG	283	51.362	38.024	58.466	1.00	37.61	AAAA	C
ATOM	2705	HH1	ARG	283	51.065	38.846	57.944	1.00	31.41	AAAA	H
ATOM	2708	HH2	ARG	283	51.661	36.722	58.596	1.00	31.97	AAAA	H
ATOM	2711	C	ARG	283	51.945	44.499	61.190	1.00	42.27	AAAA	C
ATOM	2712	O	ARG	283	51.931	45.228	60.173	1.00	43.42	AAAA	O
ATOM	2713	H	ASU	284	52.362	44.886	62.422	1.00	39.49	AAAA	H
ATOM	2715	CA	ASU	284	52.733	46.311	62.574	1.00	42.07	AAAA	C
ATOM	2721	C	ASU	284	54.078	46.656	61.929	1.00	41.64	AAAA	C
ATOM	2722	O	ASU	284	54.431	47.798	61.712	1.00	39.01	AAAA	O
ATOM	2716	CB	ASU	284	52.734	46.760	64.032	1.00	37.33	AAAA	C
ATOM	2717	CG	ASU	284	53.917	46.028	64.611	1.00	50.21	AAAA	C
ATOM	2718	OD1	ASU	284	54.609	45.104	64.192	1.00	44.30	AAAA	O
ATOM	2719	HD2	ASU	284	54.323	46.432	65.842	1.00	42.46	AAAA	H
ATOM	2723	H	GLY	285	54.933	45.699	61.562	1.00	40.10	AAAA	H
ATOM	2725	CA	GLY	285	55.971	45.815	60.593	1.00	26.91	AAAA	C
ATOM	2726	C	GLY	285	56.091	44.468	59.848	1.00	33.12	AAAA	C
ATOM	2727	O	GLY	285	55.584	43.331	60.187	1.00	29.51	AAAA	O
ATOM	2728	H	SER	286	56.915	44.619	58.766	1.00	26.53	AAAA	H
ATOM	2730	CA	SER	286	57.109	43.385	57.975	1.00	32.67	AAAA	C
ATOM	2731	CB	SER	286	57.944	43.681	56.757	1.00	33.19	AAAA	C
ATOM	2732	CG	SER	286	58.283	42.480	56.014	1.00	31.95	AAAA	C
ATOM	2734	C	SER	286	57.750	42.310	58.836	1.00	34.57	AAAA	C
ATOM	2735	O	SER	286	58.700	42.495	59.607	1.00	44.29	AAAA	O
ATOM	2736	H	GLN	287	57.227	41.148	58.940</				

項目	2000年	2001年	2002年	2003年	2004年	2005年	2006年	2007年	2008年	2009年	2010年	2011年	2012年	2013年	2014年	2015年	2016年	2017年	2018年	2019年	2020年
1. 総人口	12,800,000	12,850,000	12,900,000	12,950,000	13,000,000	13,050,000	13,100,000	13,150,000	13,200,000	13,250,000	13,300,000	13,350,000	13,400,000	13,450,000	13,500,000	13,550,000	13,600,000	13,650,000	13,700,000	13,750,000	13,800,000
2. 男性人口	6,400,000	6,425,000	6,450,000	6,475,000	6,500,000	6,525,000	6,550,000	6,575,000	6,600,000	6,625,000	6,650,000	6,675,000	6,700,000	6,725,000	6,750,000	6,775,000	6,800,000	6,825,000	6,850,000	6,875,000	6,900,000
3. 女性人口	6,400,000	6,425,000	6,450,000	6,475,000	6,500,000	6,525,000	6,550,000	6,575,000	6,600,000	6,625,000	6,650,000	6,675,000	6,700,000	6,725,000	6,750,000	6,775,000	6,800,000	6,825,000	6,850,000	6,875,000	6,900,000
4. 出生人口	1,200,000	1,180,000	1,160,000	1,140,000	1,120,000	1,100,000	1,080,000	1,060,000	1,040,000	1,020,000	1,000,000	980,000	960,000	940,000	920,000	900,000	880,000	860,000	840,000	820,000	800,000
5. 死亡人口	800,000	820,000	840,000	860,000	880,000	900,000	920,000	940,000	960,000	980,000	1,000,000	1,020,000	1,040,000	1,060,000	1,080,000	1,100,000	1,120,000	1,140,000	1,160,000	1,180,000	1,200,000
6. 自然増減	400,000	360,000	320,000	280,000	240,000	200,000	160,000	120,000	80,000	40,000	0	-20,000	-40,000	-60,000	-80,000	-100,000	-120,000	-140,000	-160,000	-180,000	-200,000
7. 人口密度	120/平方キロメートル	121/平方キロメートル	122/平方キロメートル	123/平方キロメートル	124/平方キロメートル	125/平方キロメートル	126/平方キロメートル	127/平方キロメートル	128/平方キロメートル	129/平方キロメートル	130/平方キロメートル	131/平方キロメートル	132/平方キロメートル	133/平方キロメートル	134/平方キロメートル	135/平方キロメートル	136/平方キロメートル	137/平方キロメートル	138/平方キロメートル	139/平方キロメートル	140/平方キロメートル

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ATOH	2792	CD1	ILE	292	49.234	48.564	63.168	1.00	32.90	AAAA	C
ATOH	2793	C	ILE	292	46.249	46.003	63.406	1.00	50.01	AAAA	C
ATOH	2794	C	ILE	292	46.165	45.526	62.670	1.00	46.64	AAAA	O
ATOH	2795	II	PRO	293	45.150	46.507	64.385	1.00	51.86	AAAA	II
ATOH	2796	CD	PRO	293	45.009	46.804	65.832	1.00	51.05	AAAA	C
ATOH	2797	CA	PRO	293	43.958	46.930	63.675	1.00	51.40	AAAA	C
ATOH	2798	CB	PRO	293	43.170	47.784	64.681	1.00	49.00	AAAA	C
ATOH	2799	CG	PRO	293	43.533	47.112	65.951	1.00	53.73	AAAA	C
ATOH	2800	C	PRO	293	44.253	47.870	62.525	1.00	51.68	AAAA	C
ATOH	2801	O	PRO	293	45.053	48.788	62.737	1.00	51.92	AAAA	O
ATOH	2802	II	CYS	294	43.607	47.621	61.408	1.00	50.66	AAAA	II
ATOH	2804	CA	CYS	294	43.811	48.464	60.254	1.00	57.90	AAAA	C
ATOH	2805	C	CYS	294	43.219	49.848	60.345	1.00	59.59	AAAA	C
ATOH	2806	O	CYS	294	43.744	50.814	59.785	1.00	60.87	AAAA	O
ATOH	2807	CB	CYS	294	43.229	47.686	59.046	1.00	57.59	AAAA	C
ATOH	2808	SG	CYS	294	44.408	46.460	58.563	1.00	51.12	AAAA	S
ATOH	2809	II	ALA	295	42.009	50.031	60.954	1.00	65.87	AAAA	II
ATOH	2811	CA	ALA	295	41.391	51.386	60.804	1.00	71.19	AAAA	C
ATOH	2812	CB	ALA	295	42.311	52.459	61.393	1.00	63.82	AAAA	C
ATOH	2813	C	ALA	295	40.971	51.770	59.379	1.00	69.17	AAAA	C
ATOH	2814	O	ALA	295	41.421	52.717	58.762	1.00	64.70	AAAA	O
ATOH	2815	II	GLY	296	40.153	50.920	58.775	1.00	71.30	AAAA	II
ATOH	2817	CA	GLY	296	39.640	51.049	57.416	1.00	72.66	AAAA	C
ATOH	2818	C	GLY	296	39.895	49.686	56.769	1.00	74.20	AAAA	C
ATOH	2819	O	GLY	296	40.408	48.819	57.490	1.00	75.04	AAAA	O
ATOH	2820	II	PRO	297	39.561	49.540	55.497	1.00	71.98	AAAA	II
ATOH	2821	CD	PRO	297	38.928	50.561	54.637	1.00	72.15	AAAA	C
ATOH	2822	CA	PRO	297	39.958	48.344	54.777	1.00	68.23	AAAA	C
ATOH	2823	CB	PRO	297	39.498	48.603	53.369	1.00	72.57	AAAA	C
ATOH	2824	CG	PRO	297	38.470	49.697	53.490	1.00	74.01	AAAA	C
ATOH	2825	C	PRO	297	41.480	48.306	51.860	1.00	65.78	AAAA	C
ATOH	2826	O	PRO	297	42.147	49.323	54.997	1.00	62.72	AAAA	O
ATOH	2827	II	CYS	298	42.039	47.135	55.073	1.00	63.85	AAAA	II
ATOH	2829	CA	CYS	298	43.464	46.953	55.248	1.00	54.47	AAAA	C
ATOH	2830	C	CYS	298	44.109	47.303	53.908	1.00	54.56	AAAA	C
ATOH	2831	O	CYS	298	43.621	47.030	52.820	1.00	54.83	AAAA	O
ATOH	2832	CB	CYS	298	43.665	45.544	55.669	1.00	47.65	AAAA	C
ATOH	2833	SG	CYS	298	43.501	45.115	57.371	1.00	46.12	AAAA	S
ATOH	2834	II	PRO	299	45.310	47.876	53.967	1.00	49.83	AAAA	II
ATOH	2835	CD	PRO	299	46.087	48.168	55.194	1.00	48.14	AAAA	C
ATOH	2836	CA	PRO	299	46.055	48.212	52.787	1.00	43.67	AAAA	C
ATOH	2837	CB	PRO	299	47.267	48.965	53.281	1.00	44.08	AAAA	C
ATOH	2838	CG	PRO	299	47.454	48.361	54.628	1.00	51.38	AAAA	C
ATOH	2839	C	PRO	299	46.341	46.969	52.010	1.00	38.86	AAAA	C
ATOH	2840	O	PRO	299	46.372	45.874	52.546	1.00	42.85	AAAA	O
ATOH	2841	II	LYS	300	46.310	47.073	50.712	1.00	38.30	AAAA	II
ATOH	2843	CA	LYS	300	46.484	45.958	49.812	1.00	42.62	AAAA	C
ATOH	2844	CB	LYS	300	45.176	45.226	49.595	1.00	34.28	AAAA	C
ATOH	2845	CG	LYS	300	45.346	43.901	48.920	1.00	41.45	AAAA	C
ATOH	2846	CD	LYS	300	44.613	43.413	48.378	1.00	48.31	AAAA	C
ATOH	2847	CE	LYS	300	44.388	42.027	47.797	1.00	48.57	AAAA	C
ATOH	2848	HC	LYS	300	43.662	42.031	46.478	1.00	63.70	AAAA	II
ATOH	2852	C	LYS	300	46.964	46.479	48.432	1.00	48.72	AAAA	C
ATOH	2853	O	LYS	300	46.413	47.383	47.776	1.00	46.09	AAAA	O
ATOH	2854	II	VAL	301	49.150	45.984	48.654	1.00	48.15	AAAA	II
ATOH	2856	CA	VAL	301	48.802	46.462	46.871	1.00	44.52	AAAA	C
ATOH	2857	CB	VAL	301	50.292	46.729	47.074	1.00	51.52	AAAA	C
ATOH	2858	CG1	VAL	301	51.008	47.200	45.796	1.00	43.07	AAAA	C
ATOH	2859	CG2	VAL	301	50.495	47.794	45.241	1.00	49.50	AAAA	C
ATOH	2860	C	VAL	301	48.526	45.410	45.837	1.00	44.59	AAAA	C
ATOH	2861	O	VAL	301	48.913	44.291	46.060	1.00	43.70	AAAA	O
ATOH	2862	II	CYS	302	47.919	45.816	44.718	1.00	47.98	AAAA	II
ATOH	2864	CA	CYS	302	47.645	44.735	43.739	1.00	55.19	AAAA	C
ATOH	2865	C	CYS	302	48.594	44.968	42.583	1.00	57.64	AAAA	C
ATOH	2866	O	CYS	302	48.852	46.152	42.313	1.00	60.23	AAAA	O
ATOH	2867	CG	CYS	302	46.166	44.630	43.330	1.00	68.30	AAAA	C
ATOH	2868	SG	CYS	302	45.070	44.360	44.751	1.00	70.31	AAAA	S
ATOH	2869	II	GLU	303	49.183	43.921	42.075	1.00	58.15	AAAA	II
ATOH	2871	CA	GLU	303	50.174	43.932	41.034	1.00	62.85	AAAA	C
ATOH	2872	CB	GLU	303	51.603	44.006	41.535	1.00	67.85	AAAA	C
ATOH	2873	CG	GLU	303	51.760	43.487	43.014	0.01	67.46	AAAA	C
ATOH	2874	CD	GLU	303	51.999	41.992	43.697	0.01	67.91	AAAA	C
ATOH	2875	OE1	GLU	303	53.011	41.514	42.561	0.01	67.67	AAAA	O
ATOH	2876	OE2	GLU	303	51.147	41.290	43.697	0.01	67.65	AAAA	O
ATOH	2877	C	GLU	303	50.096	42.662	40.194	1.00	64.12	AAAA	C
ATOH	2878	O	GLU	303	50.162	41.562	40.708	1.00	65.08	AAAA	O
ATOH	2879	II	GLU	304	49.867	42.794	38.904	1.00	67.37	AAAA	II
ATOH	2881	CA	GLU	304	49.672	41.583	38.094	1.00	74.63	AAAA	C
ATOH	2882	CB	GLU	304	48.285	41.596	37.458	1.00	71.71	AAAA	C
ATOH	2883	CG	GLU	304	47.339	42.663	39.031	1.00	84.54	AAAA	C
ATOH	2884	CD	GLU	304	45.930	42.152	38.195	1.00	87.56	AAAA	C
ATOH	2885	OE1	GLU	304	45.438	41.571	37.179	1.00	89.13	AAAA	O
ATOH	2886	OE2	GLU	304	45.249	42.269	39.233	1.00	93.19	AAAA	O
ATOH	2887	C	GLU	304	50.966	41.307	37.190	1.00	76.10	AAAA	C
ATOH	2888	O	GLU	304	51.311	41.962	37.217	1.00	74.78	AAAA	O

29/58

ATOH	2889	H	GLU	305	50.899	40.126	36.586	1.00	77.21	AAAA H
ATOH	2891	CA	GLU	305	51.932	39.656	35.674	1.00	75.96	AAAA C
ATOH	2892	CB	GLU	305	51.467	38.380	34.970	1.00	79.95	AAAA C
ATOH	2893	CG	GLU	305	52.307	37.937	33.807	1.00	87.20	AAAA C
ATOH	2894	CD	GLU	305	51.758	36.821	32.886	0.01	83.39	AAAA C
ATOH	2895	OE1	GLU	305	50.762	36.234	33.252	0.01	83.66	AAAA O
ATOH	2896	OE2	GLU	305	52.310	36.700	31.780	0.01	83.73	AAAA O
ATOH	2897	C	GLU	305	52.276	40.737	34.666	1.00	75.97	AAAA C
ATOH	2898	O	GLU	305	53.381	41.268	34.613	1.00	76.54	AAAA O
ATOH	2899	H	LYS	306	51.291	41.191	33.882	1.00	78.22	AAAA H
ATOH	2901	CA	LYS	306	51.479	42.329	33.004	1.00	75.99	AAAA C
ATOH	2902	CB	LYS	306	50.467	42.253	31.955	1.00	79.78	AAAA C
ATOH	2903	CG	LYS	306	51.208	42.227	30.527	1.00	84.52	AAAA C
ATOH	2904	CD	LYS	306	50.313	42.191	29.314	1.00	92.78	AAAA C
ATOH	2905	CE	LYS	306	50.740	43.227	28.261	1.00	97.10	AAAA C
ATOH	2906	HE	LYS	306	50.938	44.554	28.929	1.00	84.87	AAAA H
ATOH	2910	C	LYS	306	51.381	43.669	33.703	1.00	73.85	AAAA C
ATOH	2911	O	LYS	306	50.703	43.862	34.718	1.00	76.08	AAAA O
ATOH	2912	H	LYS	307	52.000	44.700	33.180	1.00	71.15	AAAA H
ATOH	2914	CA	LYS	307	51.934	46.053	33.692	1.00	69.45	AAAA C
ATOH	2915	CB	LYS	307	53.022	46.993	33.008	1.00	79.64	AAAA C
ATOH	2916	CG	LYS	307	54.419	46.837	33.564	1.00	78.88	AAAA C
ATOH	2917	CD	LYS	307	55.257	48.084	33.374	1.00	85.84	AAAA C
ATOH	2918	CE	LYS	307	55.708	48.215	31.924	1.00	97.07	AAAA C
ATOH	2919	HE	LYS	307	54.649	48.840	31.067	1.00	97.80	AAAA H
ATOH	2923	C	LYS	307	50.562	46.716	33.525	1.00	67.97	AAAA C
ATOH	2924	O	LYS	307	50.010	47.369	34.431	1.00	64.46	AAAA O
ATOH	2925	H	THR	308	49.979	46.661	32.323	1.00	65.84	AAAA H
ATOH	2927	CA	THR	308	48.709	47.319	32.001	1.00	64.56	AAAA C
ATOH	2928	CB	THR	308	48.714	47.977	30.711	1.00	59.91	AAAA C
ATOH	2929	CG1	THR	308	49.834	48.943	30.577	1.00	61.97	AAAA C
ATOH	2931	CG2	THR	308	47.392	48.742	30.561	1.00	63.64	AAAA C
ATOH	2932	C	THR	308	47.514	46.379	32.234	1.00	61.82	AAAA C
ATOH	2933	O	THR	308	47.412	45.415	31.477	1.00	62.05	AAAA O
ATOH	2934	H	LYS	309	46.675	46.719	33.211	1.00	55.66	AAAA H
ATOH	2936	CA	LYS	309	45.456	45.926	33.445	1.00	54.67	AAAA C
ATOH	2937	CB	LYS	309	45.043	45.880	34.904	1.00	56.82	AAAA C
ATOH	2938	CG	LYS	309	43.601	45.541	35.223	1.00	57.50	AAAA C
ATOH	2939	CD	LYS	309	43.390	44.039	35.086	1.00	59.50	AAAA C
ATOH	2940	CE	LYS	309	42.703	43.448	36.324	1.00	57.31	AAAA C
ATOH	2941	HE	LYS	309	42.758	41.954	36.236	1.00	57.22	AAAA H
ATOH	2945	C	LYS	309	44.391	46.570	32.548	1.00	51.21	AAAA C
ATOH	2946	O	LYS	309	44.074	47.763	32.680	1.00	47.23	AAAA O
ATOH	2947	H	THR	310	43.895	45.772	31.610	1.00	47.67	AAAA H
ATOH	2949	CA	THR	310	42.862	46.328	30.733	1.00	51.89	AAAA C
ATOH	2950	CB	THR	310	43.161	46.015	29.266	1.00	54.81	AAAA C
ATOH	2951	CG1	THR	310	41.909	45.710	28.635	1.00	66.29	AAAA O
ATOH	2953	CG2	THR	310	44.032	44.791	29.139	1.00	55.18	AAAA C
ATOH	2954	C	THR	310	41.468	45.841	31.117	1.00	51.15	AAAA C
ATOH	2955	O	THR	310	41.162	44.680	30.991	1.00	49.27	AAAA O
ATOH	2956	H	ILE	311	40.684	46.706	31.732	1.00	50.18	AAAA H
ATOH	2958	CA	ILE	311	39.363	46.453	32.276	1.00	48.67	AAAA C
ATOH	2959	CB	ILE	311	39.120	47.396	33.462	1.00	49.27	AAAA C
ATOH	2960	CG2	ILE	311	37.655	47.596	33.709	1.00	50.72	AAAA C
ATOH	2961	CG1	ILE	311	39.896	48.930	34.699	1.00	41.34	AAAA C
ATOH	2962	CD1	ILE	311	39.847	48.073	35.739	1.00	52.22	AAAA C
ATOH	2963	C	ILE	311	38.334	46.729	31.186	1.00	45.37	AAAA C
ATOH	2964	O	ILE	311	38.132	47.875	30.758	1.00	37.14	AAAA O
ATOH	2965	H	ASP	312	37.871	45.678	30.524	1.00	50.10	AAAA H
ATOH	2967	CA	ASP	312	36.991	45.842	29.377	1.00	56.35	AAAA C
ATOH	2968	CB	ASP	312	37.546	45.152	29.128	1.00	59.45	AAAA C
ATOH	2969	CG	ASP	312	37.761	43.671	28.392	1.00	65.64	AAAA C
ATOH	2970	OD1	ASP	312	38.525	43.034	27.636	1.00	72.60	AAAA O
ATOH	2971	OD2	ASP	312	37.154	43.176	29.348	1.00	66.86	AAAA O
ATOH	2972	C	ASP	312	35.589	45.337	29.693	1.00	59.39	AAAA C
ATOH	2973	O	ASP	312	34.729	45.607	28.887	1.00	61.00	AAAA O
ATOH	2974	H	SER	313	35.278	45.290	30.976	1.00	61.17	AAAA H
ATOH	2976	CA	SER	313	34.053	44.683	31.459	1.00	55.73	AAAA C
ATOH	2977	CB	SER	313	34.121	43.701	31.093	1.00	48.22	AAAA C
ATOH	2978	CG	SER	313	34.373	42.514	32.292	1.00	57.89	AAAA C
ATOH	2980	C	SER	313	33.998	44.818	32.911	1.00	57.87	AAAA C
ATOH	2981	O	SER	313	34.802	45.506	33.537	1.00	60.47	AAAA O
ATOH	2982	H	VAL	314	33.901	44.005	33.545	1.00	64.35	AAAA H
ATOH	2984	CA	VAL	314	32.940	44.305	35.016	1.00	64.39	AAAA C
ATOH	2985	CB	VAL	314	31.360	44.340	35.343	1.00	69.57	AAAA C
ATOH	2986	CG1	VAL	314	31.024	43.693	36.691	1.00	65.60	AAAA C
ATOH	2987	CG2	VAL	314	30.927	45.823	35.319	1.00	65.27	AAAA C
ATOH	2988	C	VAL	314	33.492	43.088	35.638	1.00	62.65	AAAA C
ATOH	2989	O	VAL	314	34.029	43.141	35.704	1.00	63.92	AAAA O
ATOH	2990	H	THR	315	33.468	42.011	34.878	1.00	61.82	AAAA H
ATOH	2992	CA	THR	315	34.029	40.752	35.284	1.00	63.44	AAAA C
ATOH	2993	CB	THR	315	33.618	39.629	34.314	1.00	65.54	AAAA C
ATOH	2994	CG1	THR	315	32.403	40.004	33.634	1.00	74.05	AAAA O
ATOH	2996	CG2	THR	315	33.339	38.356	35.104	1.00	64.86	AAAA C
ATOH	2997	C	THR	315	35.541	40.971	35.323	1.00	65.62	AAAA C

TABLE 5 (continued)

30/58

ATOH	3098	O	THR	315	36.217	40.239	36.206	1.00	66.41	AAAA	O
ATOH	3099	H	SER	316	36.071	41.593	34.332	1.00	63.28	AAAA	H
ATOH	3001	CA	SER	316	37.500	41.793	34.215	1.00	58.72	AAAA	C
ATOH	3002	CB	SER	316	37.785	42.537	32.990	1.00	52.20	AAAA	C
ATOH	3003	OD	SER	316	37.298	43.852	32.933	1.00	48.04	AAAA	O
ATOH	3005	C	SER	316	38.077	42.573	35.387	1.00	58.91	AAAA	C
ATOH	3006	O	SER	316	39.293	42.522	35.520	1.00	59.86	AAAA	O
ATOH	3007	H	ALA	317	37.310	43.362	36.111	1.00	55.86	AAAA	H
ATOH	3009	CA	ALA	317	37.750	44.184	37.191	1.00	57.17	AAAA	C
ATOH	3010	CB	ALA	317	36.933	45.409	37.269	1.00	54.23	AAAA	C
ATOH	3011	C	ALA	317	37.689	43.487	38.539	1.00	62.05	AAAA	C
ATOH	3012	O	ALA	317	37.702	44.128	39.599	1.00	60.30	AAAA	O
ATOH	3013	H	GLN	318	37.361	42.205	38.523	1.00	67.91	AAAA	H
ATOH	3015	CA	GLN	318	37.195	41.380	39.713	1.00	70.72	AAAA	C
ATOH	3016	CB	GLN	318	36.857	29.956	39.293	1.00	74.48	AAAA	C
ATOH	3017	OD	GLN	318	36.624	38.947	40.383	1.00	89.82	AAAA	C
ATOH	3018	CD	GLN	318	35.265	39.080	41.048	1.00	92.69	AAAA	C
ATOH	3019	OE1	GLN	318	34.256	38.807	40.391	1.00	98.57	AAAA	O
ATOH	3020	HE2	GLN	318	35.356	39.509	42.308	1.00	92.51	AAAA	H
ATOH	3023	C	GLN	318	38.380	41.413	40.653	1.00	72.63	AAAA	C
ATOH	3024	O	GLN	318	38.194	41.855	41.804	1.00	68.92	AAAA	O
ATOH	3025	H	NET	319	39.562	41.062	40.153	1.00	75.18	AAAA	H
ATOH	3027	CA	NET	319	40.846	41.175	40.826	1.00	71.85	AAAA	C
ATOH	3028	CB	NET	319	41.950	40.960	39.772	1.00	82.00	AAAA	C
ATOH	3029	CG	NET	319	41.740	39.644	39.050	1.00	91.16	AAAA	C
ATOH	3030	SD	NET	319	43.123	38.482	39.185	1.00	106.72	AAAA	S
ATOH	3031	CE	NET	319	42.486	37.105	38.231	1.00	97.56	AAAA	C
ATOH	3032	C	NET	319	41.118	42.509	41.471	1.00	67.68	AAAA	C
ATOH	3033	O	NET	319	41.577	42.541	42.612	1.00	69.73	AAAA	O
ATOH	3034	H	LEU	320	40.740	43.639	40.887	1.00	62.95	AAAA	H
ATOH	3036	CA	LEU	320	40.907	44.838	41.531	1.00	62.31	AAAA	C
ATOH	3037	CB	LEU	320	40.440	46.085	40.623	1.00	54.93	AAAA	C
ATOH	3038	OD	LEU	320	41.091	46.163	39.230	1.00	53.48	AAAA	C
ATOH	3039	CD1	LEU	320	41.005	47.552	38.692	1.00	51.31	AAAA	C
ATOH	3040	CD2	LEU	320	42.557	45.709	39.403	1.00	58.43	AAAA	C
ATOH	3041	C	LEU	320	40.209	45.008	42.881	1.00	60.30	AAAA	C
ATOH	3042	O	LEU	320	40.344	45.969	43.661	1.00	58.72	AAAA	O
ATOH	3043	H	GLN	321	39.267	44.106	43.112	1.00	59.62	AAAA	H
ATOH	3045	CA	GLN	321	38.482	44.128	44.343	1.00	63.50	AAAA	C
ATOH	3046	CB	GLN	321	37.373	43.089	44.250	1.00	62.52	AAAA	C
ATOH	3047	OD	GLN	321	36.611	42.854	45.522	1.00	56.83	AAAA	C
ATOH	3048	CD	GLN	321	35.337	42.064	45.291	1.00	68.77	AAAA	C
ATOH	3049	OE1	GLN	321	35.362	40.969	44.718	1.00	70.37	AAAA	O
ATOH	3050	HE2	GLN	321	34.218	42.632	45.764	1.00	63.77	AAAA	H
ATOH	3053	C	GLN	321	39.367	44.030	45.594	1.00	60.97	AAAA	C
ATOH	3054	O	GLN	321	40.262	43.196	45.782	1.00	57.29	AAAA	O
ATOH	3055	H	GLY	322	39.092	44.928	46.546	1.00	57.62	AAAA	H
ATOH	3057	CA	GLY	322	39.855	44.928	47.790	1.00	60.63	AAAA	C
ATOH	3058	C	GLY	322	41.126	45.773	47.812	1.00	61.78	AAAA	C
ATOH	3059	O	GLY	322	41.584	46.198	48.889	1.00	60.16	AAAA	O
ATOH	3060	H	CYS	323	41.719	46.124	46.676	1.00	60.03	AAAA	H
ATOH	3062	CA	CYS	323	42.938	46.845	46.528	1.00	54.20	AAAA	C
ATOH	3063	C	CYS	323	42.924	48.307	46.910	1.00	53.48	AAAA	C
ATOH	3064	O	CYS	323	42.105	49.148	46.503	1.00	56.43	AAAA	O
ATOH	3065	CB	CYS	323	43.459	46.822	45.096	1.00	53.33	AAAA	C
ATOH	3066	SG	CYS	323	43.325	45.222	44.248	1.00	66.22	AAAA	S
ATOH	3067	H	THR	324	43.994	48.718	47.580	1.00	49.83	AAAA	H
ATOH	3069	CA	THR	324	44.164	50.161	47.811	1.00	52.29	AAAA	C
ATOH	3070	CB	THR	324	44.623	50.324	49.264	1.00	52.84	AAAA	C
ATOH	3071	OG1	THR	324	45.245	49.087	49.634	1.00	59.82	AAAA	O
ATOH	3073	CG2	THR	324	43.432	50.517	50.193	1.00	60.00	AAAA	C
ATOH	3074	C	THR	324	45.154	50.802	46.844	1.00	48.91	AAAA	C
ATOH	3075	O	THR	324	45.277	52.016	46.710	1.00	46.90	AAAA	O
ATOH	3076	H	ILE	325	46.021	49.963	46.254	1.00	46.87	AAAA	H
ATOH	3078	CA	ILE	325	47.114	50.511	45.445	1.00	45.10	AAAA	C
ATOH	3079	CB	ILE	325	48.473	50.577	46.183	1.00	43.60	AAAA	C
ATOH	3080	CG2	ILE	325	49.586	50.905	45.163	1.00	47.47	AAAA	C
ATOH	3081	CG1	ILE	325	48.394	51.623	47.294	1.00	34.03	AAAA	C
ATOH	3082	CD1	ILE	325	49.585	52.010	48.028	1.00	41.94	AAAA	C
ATOH	3083	C	ILE	325	47.265	49.642	44.229	1.00	42.88	AAAA	C
ATOH	3084	O	ILE	325	47.406	48.429	44.469	1.00	42.99	AAAA	O
ATOH	3085	H	PHE	326	47.170	50.239	43.042	1.00	41.19	AAAA	H
ATOH	3087	CA	PHE	326	47.312	49.334	41.880	1.00	42.98	AAAA	C
ATOH	3088	CB	PHE	326	46.106	49.437	40.877	1.00	39.15	AAAA	C
ATOH	3089	CG	PHE	326	46.403	48.474	39.738	1.00	38.03	AAAA	C
ATOH	3090	CD1	PHE	326	46.186	47.125	39.951	1.00	39.68	AAAA	C
ATOH	3091	CD2	PHE	326	46.917	48.892	38.525	1.00	37.31	AAAA	C
ATOH	3092	CE1	PHE	326	46.447	46.139	39.023	1.00	36.52	AAAA	C
ATOH	3093	CE2	PHE	326	47.136	47.919	37.551	1.00	45.74	AAAA	C
ATOH	3094	CZ	PHE	326	46.924	46.570	37.787	1.00	39.92	AAAA	C
ATOH	3095	C	PHE	326	48.682	49.673	41.290	1.00	48.78	AAAA	C
ATOH	3096	O	PHE	326	49.024	50.826	40.966	1.00	51.39	AAAA	O
ATOH	3097	H	LYS	327	49.623	48.751	41.379	1.00	50.22	AAAA	H
ATOH	3099	CA	LYS	327	50.064	49.863	40.831	1.00	51.49	AAAA	C
ATOH	3100	CB	LYS	327	52.050	48.091	41.519	1.00	58.64	AAAA	C

10555275-000001

31/58

ATOH	3101	CG	LVS	327	53.254	48.997	41.991	1.00	59.15	AAAA	C
ATOH	3102	CD	LVS	327	54.528	48.257	41.617	1.00	63.49	AAAA	C
ATOH	3103	CE	LVS	327	55.400	48.951	40.592	1.00	68.12	AAAA	C
ATOH	3104	HD	LVS	327	56.260	47.889	39.938	1.00	71.97	AAAA	H
ATOH	3108	C	LVS	327	50.895	48.464	39.391	1.00	45.70	AAAA	C
ATOH	3109	O	LVS	327	50.901	47.245	39.127	1.00	49.55	AAAA	O
ATOH	3110	H	GLY	328	50.760	49.397	38.502	1.00	39.68	AAAA	H
ATOH	3112	CA	GLY	328	50.647	49.038	37.080	1.00	39.44	AAAA	C
ATOH	3113	C	GLY	328	49.845	50.161	36.427	1.00	39.49	AAAA	C
ATOH	3114	O	GLY	328	49.859	51.307	36.881	1.00	31.92	AAAA	O
ATOH	3115	H	ASH	329	49.286	49.813	35.289	1.00	41.47	AAAA	H
ATOH	3117	CA	ASH	329	48.467	50.750	34.543	1.00	45.72	AAAA	C
ATOH	3118	CB	ASH	329	49.185	50.942	33.211	1.00	42.50	AAAA	C
ATOH	3119	CG	ASH	329	50.624	51.426	33.357	1.00	42.26	AAAA	C
ATOH	3120	OD1	ASH	329	50.954	52.331	34.156	1.00	34.77	AAAA	O
ATOH	3121	HD2	ASH	329	51.425	50.769	32.530	1.00	30.62	AAAA	H
ATOH	3124	C	ASH	329	47.038	50.207	34.357	1.00	50.37	AAAA	C
ATOH	3125	O	ASH	329	46.736	49.015	34.119	1.00	50.17	AAAA	O
ATOH	3126	H	LEU	330	46.090	51.143	34.413	1.00	47.13	AAAA	H
ATOH	3128	CA	LEU	330	44.691	50.860	34.151	1.00	42.53	AAAA	C
ATOH	3129	CB	LEU	330	43.751	51.530	35.153	1.00	42.84	AAAA	C
ATOH	3130	CG	LEU	330	43.768	50.995	36.598	1.00	38.65	AAAA	C
ATOH	3131	CD1	LEU	330	42.864	51.924	37.417	1.00	38.12	AAAA	C
ATOH	3132	CD2	LEU	330	43.283	49.565	36.669	1.00	38.74	AAAA	C
ATOH	3133	C	LEU	330	44.352	51.377	32.758	1.00	39.10	AAAA	C
ATOH	3134	O	LEU	330	44.509	52.545	32.460	1.00	40.71	AAAA	O
ATOH	3135	H	LEU	331	43.933	50.516	31.904	1.00	36.10	AAAA	H
ATOH	3137	CA	LEU	331	43.367	50.869	30.625	1.00	43.10	AAAA	C
ATOH	3138	CB	LEU	331	43.959	49.894	29.585	1.00	42.29	AAAA	C
ATOH	3139	CG	LEU	331	43.301	49.960	28.221	1.00	40.89	AAAA	C
ATOH	3140	CD1	LEU	331	43.501	51.319	27.627	1.00	46.64	AAAA	C
ATOH	3141	CD2	LEU	331	43.844	48.834	27.367	1.00	48.76	AAAA	C
ATOH	3142	C	LEU	331	41.872	50.568	30.705	1.00	41.12	AAAA	C
ATOH	3143	O	LEU	331	41.562	49.365	30.779	1.00	40.08	AAAA	O
ATOH	3144	H	ILE	332	41.029	51.566	30.862	1.00	41.13	AAAA	H
ATOH	3146	CA	ILE	332	39.606	51.241	31.044	1.00	36.90	AAAA	C
ATOH	3147	CB	ILE	332	38.885	52.085	32.076	1.00	34.77	AAAA	C
ATOH	3148	CG2	ILE	332	37.413	51.612	32.195	1.00	34.66	AAAA	C
ATOH	3149	CG1	ILE	332	39.550	51.895	33.452	1.00	33.64	AAAA	C
ATOH	3150	CD1	ILE	332	39.479	53.152	34.337	1.00	48.21	AAAA	C
ATOH	3151	C	ILE	332	38.959	51.367	29.688	1.00	34.03	AAAA	C
ATOH	3152	O	ILE	332	38.867	52.489	29.200	1.00	35.89	AAAA	O
ATOH	3153	H	ASH	333	38.569	50.273	29.094	1.00	35.25	AAAA	H
ATOH	3155	CA	ASH	333	38.014	50.283	27.737	1.00	40.34	AAAA	C
ATOH	3156	CB	ASH	333	38.960	49.499	26.797	1.00	50.50	AAAA	C
ATOH	3157	CG	ASH	333	38.668	49.493	25.310	1.00	59.29	AAAA	C
ATOH	3158	OD1	ASH	333	37.845	48.711	24.784	1.00	64.54	AAAA	O
ATOH	3159	HD2	ASH	333	39.290	50.350	24.467	1.00	45.83	AAAA	H
ATOH	3162	C	ASH	333	36.666	49.581	27.755	1.00	47.63	AAAA	C
ATOH	3163	O	ASH	333	36.462	48.409	27.398	1.00	44.40	AAAA	O
ATOH	3164	H	ILE	334	35.644	50.213	28.315	1.00	54.13	AAAA	H
ATOH	3166	CA	ILE	334	34.332	49.537	28.460	1.00	59.07	AAAA	C
ATOH	3167	CB	ILE	334	33.788	49.826	29.876	1.00	61.98	AAAA	C
ATOH	3168	CG2	ILE	334	32.362	49.355	30.947	1.00	54.04	AAAA	C
ATOH	3169	CG1	ILE	334	34.737	49.224	30.915	1.00	60.43	AAAA	C
ATOH	3170	CD1	ILE	334	34.346	49.687	32.317	1.00	68.57	AAAA	C
ATOH	3171	C	ILE	334	33.271	50.032	27.476	1.00	59.45	AAAA	C
ATOH	3172	O	ILE	334	32.726	51.136	27.635	1.00	56.22	AAAA	O
ATOH	3173	H	ARG	335	32.919	49.181	26.550	1.00	59.69	AAAA	H
ATOH	3175	CA	ARG	335	31.910	49.567	25.573	1.00	73.93	AAAA	C
ATOH	3176	CB	ARG	335	32.262	48.903	24.240	1.00	74.44	AAAA	C
ATOH	3177	CG	ARG	335	33.729	48.932	23.918	1.00	82.97	AAAA	C
ATOH	3178	CD	ARG	335	34.102	49.289	22.500	1.00	86.49	AAAA	C
ATOH	3179	HE	ARG	335	34.361	48.040	21.777	1.00	89.93	AAAA	H
ATOH	3181	CE	ARG	335	34.011	47.838	20.496	1.00	93.67	AAAA	C
ATOH	3182	HH1	ARG	335	33.409	48.852	19.843	1.00	87.24	AAAA	H
ATOH	3185	HH2	ARG	335	34.256	46.674	19.877	1.00	75.31	AAAA	H
ATOH	3188	C	ARG	335	30.492	49.233	26.021	1.00	81.52	AAAA	C
ATOH	3189	O	ARG	335	29.664	50.115	26.239	1.00	84.11	AAAA	O
ATOH	3190	H	ALA	336	30.208	47.953	26.234	1.00	87.51	AAAA	H
ATOH	3192	CA	ALA	336	28.878	47.484	26.601	1.00	92.40	AAAA	C
ATOH	3193	CB	ALA	336	28.835	45.980	26.633	1.00	94.03	AAAA	C
ATOH	3194	C	ALA	336	28.479	48.058	27.953	1.00	96.61	AAAA	C
ATOH	3195	O	ALA	336	29.316	48.019	28.855	1.00	96.96	AAAA	O
ATOH	3196	H	GLY	337	27.298	48.685	28.039	1.00	99.74	AAAA	H
ATOH	3198	CA	GLY	337	26.986	49.385	29.272	1.00	103.11	AAAA	C
ATOH	3199	C	GLY	337	25.568	49.303	29.763	1.00	105.51	AAAA	C
ATOH	3200	O	GLY	337	24.801	50.267	29.596	1.00	106.64	AAAA	O
ATOH	3201	H	ASH	338	25.243	48.146	30.346	1.00	105.41	AAAA	H
ATOH	3203	CA	ASH	338	23.886	48.017	30.908	1.00	106.92	AAAA	C
ATOH	3204	CB	ASH	338	23.714	46.689	31.624	1.00	109.14	AAAA	C
ATOH	3205	CG	ASH	338	24.403	45.541	30.928	1.00	112.30	AAAA	C
ATOH	3206	OD1	ASH	338	25.598	45.595	30.625	1.00	117.94	AAAA	O
ATOH	3207	HD2	ASH	338	23.604	44.508	30.683	1.00	113.72	AAAA	H
ATOH	3210	C	ASH	338	23.790	49.160	31.931	1.00	105.84	AAAA	C

32/58

ATOM	3211	O	ASH	338	23.544	50.345	31.735	1.00103.97	AAAA	O
ATOM	3212	H	ASH	339	24.290	48.762	33.093	1.00105.47	AAAA	H
ATOM	3214	CA	ASH	339	24.529	49.740	34.159	1.00107.10	AAAA	C
ATOM	3215	CB	ASH	339	23.252	49.915	34.945	1.00109.15	AAAA	C
ATOM	3216	CG	ASH	339	22.777	51.351	35.003	0.01107.52	AAAA	C
ATOM	3217	OD1	ASH	339	22.715	51.931	36.089	0.01107.49	AAAA	O
ATOM	3218	OD2	ASH	339	22.441	51.932	33.859	0.01107.46	AAAA	H
ATOM	3221	C	ASH	339	25.697	49.237	35.007	1.00106.33	AAAA	C
ATOM	3222	O	ASH	339	25.520	48.390	35.886	1.00108.82	AAAA	O
ATOM	3223	H	ILE	340	26.997	49.527	34.510	1.00101.36	AAAA	H
ATOM	3225	CA	ILE	340	29.136	49.101	35.139	1.0097.43	AAAA	C
ATOM	3226	CB	ILE	340	29.040	48.354	34.151	1.0093.63	AAAA	C
ATOM	3227	CG2	ILE	340	28.194	47.252	33.499	1.0099.38	AAAA	C
ATOM	3228	CG1	ILE	340	29.726	49.158	33.070	1.0085.50	AAAA	C
ATOM	3229	CD1	ILE	340	28.897	49.634	31.915	1.0092.53	AAAA	C
ATOM	3230	C	ILE	340	28.783	50.357	35.706	1.0095.32	AAAA	C
ATOM	3231	O	ILE	340	29.472	51.099	34.997	1.0097.86	AAAA	O
ATOM	3232	H	ALA	341	29.409	50.739	36.915	1.0089.89	AAAA	H
ATOM	3234	CA	ALA	341	28.892	52.008	37.450	1.0088.45	AAAA	C
ATOM	3235	CB	ALA	341	28.068	53.201	37.006	1.0081.56	AAAA	C
ATOM	3236	C	ALA	341	28.706	51.968	38.970	1.0085.37	AAAA	C
ATOM	3237	O	ALA	341	28.910	52.935	39.690	1.0086.09	AAAA	O
ATOM	3238	H	SER	342	28.204	50.877	39.386	1.0084.24	AAAA	H
ATOM	3240	CA	SER	342	27.910	50.601	40.780	1.0082.05	AAAA	C
ATOM	3241	CB	SER	342	26.426	50.667	41.112	1.0085.51	AAAA	C
ATOM	3242	CG	SER	342	26.145	51.271	42.361	1.0086.02	AAAA	O
ATOM	3244	C	SER	342	28.487	49.196	40.965	1.0076.62	AAAA	C
ATOM	3245	O	SER	342	29.119	48.966	41.964	1.0071.76	AAAA	O
ATOM	3246	H	GLU	343	28.373	48.409	39.905	1.0076.23	AAAA	H
ATOM	3248	CA	GLU	343	29.201	47.109	39.020	1.0074.59	AAAA	C
ATOM	3249	CB	GLU	343	28.595	46.300	38.616	1.0078.62	AAAA	C
ATOM	3250	CG	GLU	343	27.118	46.105	38.316	1.0085.33	AAAA	C
ATOM	3251	CD	GLU	343	26.898	45.121	37.169	1.0092.76	AAAA	C
ATOM	3252	OE1	GLU	343	27.209	43.911	37.310	1.0096.41	AAAA	O
ATOM	3253	OE2	GLU	343	26.123	45.517	36.082	1.0098.55	AAAA	O
ATOM	3254	C	GLU	343	30.525	47.319	39.804	1.0077.75	AAAA	C
ATOM	3255	O	GLU	343	31.273	46.787	40.637	1.0075.73	AAAA	O
ATOM	3256	H	LEU	344	31.022	48.237	38.966	1.0075.65	AAAA	H
ATOM	3258	CA	LEU	344	32.415	48.596	38.839	1.0072.36	AAAA	C
ATOM	3259	CB	LEU	344	32.760	49.697	37.808	1.0064.33	AAAA	C
ATOM	3260	CG	LEU	344	32.687	49.397	36.311	1.0050.12	AAAA	C
ATOM	3261	CD1	LEU	344	33.224	50.577	35.519	1.0057.00	AAAA	C
ATOM	3262	CD2	LEU	344	33.401	48.127	35.905	1.0051.62	AAAA	C
ATOM	3263	C	LEU	344	32.963	49.130	40.174	1.0069.74	AAAA	C
ATOM	3264	O	LEU	344	34.079	48.739	40.551	1.0069.12	AAAA	O
ATOM	3265	H	GLU	345	32.166	49.959	40.822	1.0063.10	AAAA	H
ATOM	3267	CA	GLU	345	32.555	50.591	42.061	1.0065.42	AAAA	C
ATOM	3268	CB	GLU	345	31.592	51.714	42.478	1.0055.59	AAAA	C
ATOM	3269	CG	GLU	345	32.267	52.607	43.486	1.0068.78	AAAA	C
ATOM	3270	CD	GLU	345	31.324	53.374	44.376	1.0081.31	AAAA	C
ATOM	3271	OE1	GLU	345	30.614	54.320	43.976	1.0095.60	AAAA	O
ATOM	3272	OE2	GLU	345	31.237	53.078	45.595	1.0088.79	AAAA	O
ATOM	3273	C	GLU	345	32.796	49.652	43.255	1.0063.31	AAAA	C
ATOM	3274	O	GLU	345	33.501	49.913	44.134	1.0060.08	AAAA	O
ATOM	3275	H	ASN	346	32.151	48.462	43.202	1.0062.25	AAAA	H
ATOM	3277	CA	ASN	346	32.285	47.403	44.173	1.0063.92	AAAA	C
ATOM	3278	CB	ASN	346	31.024	46.498	44.095	1.0061.66	AAAA	C
ATOM	3279	CG	ASN	346	31.110	45.292	45.006	1.0058.73	AAAA	C
ATOM	3280	OD1	ASN	346	31.188	45.352	46.224	1.0069.11	AAAA	O
ATOM	3281	OD2	ASN	346	31.155	44.092	44.444	1.0051.10	AAAA	H
ATOM	3284	C	ASN	346	33.532	46.580	43.870	1.0063.71	AAAA	C
ATOM	3285	O	ASN	346	33.636	45.336	43.905	1.0065.65	AAAA	O
ATOM	3286	H	PHE	347	34.419	47.173	43.066	1.0063.23	AAAA	H
ATOM	3288	CA	PHE	347	35.540	46.411	42.506	1.0061.39	AAAA	C
ATOM	3289	CB	PHE	347	35.123	45.854	41.170	1.0061.38	AAAA	C
ATOM	3290	CG	PHE	347	34.457	44.534	41.142	1.0065.57	AAAA	C
ATOM	3291	CD1	PHE	347	33.090	44.438	40.902	1.0075.25	AAAA	C
ATOM	3292	CD2	PHE	347	35.118	43.351	41.267	1.0077.15	AAAA	C
ATOM	3293	CE1	PHE	347	32.425	43.224	40.951	1.0075.55	AAAA	C
ATOM	3294	CE2	PHE	347	34.512	42.130	41.249	1.0072.86	AAAA	C
ATOM	3295	C2	PHE	347	33.152	42.051	41.095	1.0072.74	AAAA	C
ATOM	3296	C	PHE	347	36.712	47.375	42.440	1.0057.70	AAAA	C
ATOM	3297	O	PHE	347	37.770	46.820	42.354	1.0059.92	AAAA	O
ATOM	3298	H	HET	348	36.482	48.676	42.319	1.0050.56	AAAA	H
ATOM	3300	CA	HET	348	37.500	49.630	41.964	1.0042.86	AAAA	C
ATOM	3301	CB	HET	348	37.402	50.096	40.493	1.0031.72	AAAA	C
ATOM	3302	CG	HET	348	37.426	48.933	39.471	1.0033.42	AAAA	C
ATOM	3303	SD	HET	348	37.566	49.448	37.732	1.0044.79	AAAA	S
ATOM	3304	CE	HET	348	38.408	50.999	37.791	1.0059.57	AAAA	C
ATOM	3305	C	HET	348	37.368	50.831	42.867	1.0045.88	AAAA	C
ATOM	3306	O	HET	348	38.210	51.772	42.901	1.0043.33	AAAA	O
ATOM	3307	H	GLY	349	36.296	50.793	43.603	1.0045.30	AAAA	H
ATOM	3309	CA	GLY	349	35.990	51.965	41.504	1.0049.10	AAAA	C
ATOM	3310	C	GLY	349	36.980	52.189	45.620	1.0052.77	AAAA	C
ATOM	3311	O	GLY	349	37.033	53.299	46.156	1.0053.43	AAAA	O

0055275-083001



33/58

ATOH	3312	H	LEU	350	37.791	51.159	45.025	1.00	56.17	AAAA	H
ATOH	3314	CA	LEU	350	38.735	51.256	47.621	1.00	58.04	AAAA	C
ATOH	3315	CB	LEU	350	38.873	49.949	47.834	1.00	48.00	AAAA	C
ATOH	3316	CG	LEU	350	37.871	50.020	49.031	1.00	50.79	AAAA	C
ATOH	3317	CD1	LEU	350	37.705	48.680	49.700	1.00	52.92	AAAA	C
ATOH	3318	CD2	LEU	350	38.247	51.106	50.038	1.00	56.11	AAAA	C
ATOH	3319	C	LEU	350	40.144	51.727	46.685	1.00	61.34	AAAA	C
ATOH	3320	O	LEU	350	40.231	51.962	47.619	1.00	63.52	AAAA	O
ATOH	3321	H	ILE	351	40.446	51.677	45.372	1.00	57.89	AAAA	H
ATOH	3323	CA	ILE	351	41.729	52.088	44.873	1.00	48.69	AAAA	C
ATOH	3324	CB	ILE	351	41.914	51.912	43.352	1.00	48.19	AAAA	C
ATOH	3325	CG2	ILE	351	43.121	52.416	42.757	1.00	40.01	AAAA	C
ATOH	3326	CG1	ILE	351	41.535	50.418	43.059	1.00	36.07	AAAA	C
ATOH	3327	CD1	ILE	351	41.172	50.351	41.581	1.00	35.46	AAAA	C
ATOH	3328	C	ILE	351	42.031	53.533	45.179	1.00	46.80	AAAA	C
ATOH	3329	O	ILE	351	41.367	54.358	44.626	1.00	42.87	AAAA	O
ATOH	3330	H	GLU	352	43.002	53.866	46.015	1.00	50.61	AAAA	H
ATOH	3332	CA	GLU	352	43.381	55.241	46.248	1.00	51.20	AAAA	C
ATOH	3333	CB	GLU	352	43.907	55.353	47.678	1.00	52.12	AAAA	C
ATOH	3334	CG	GLU	352	42.912	55.769	48.735	1.00	65.55	AAAA	C
ATOH	3335	CD	GLU	352	43.034	54.834	49.947	1.00	71.49	AAAA	C
ATOH	3336	OE1	GLU	352	43.881	55.244	50.765	1.00	66.09	AAAA	O
ATOH	3337	OE2	GLU	352	42.330	53.799	50.009	1.00	76.07	AAAA	O
ATOH	3338	C	GLU	352	44.502	55.751	45.314	1.00	47.43	AAAA	C
ATOH	3339	O	GLU	352	44.798	56.951	45.182	1.00	40.38	AAAA	O
ATOH	3340	H	VAL	353	45.342	54.838	44.852	1.00	43.54	AAAA	H
ATOH	3342	CA	VAL	353	46.512	55.236	44.078	1.00	43.71	AAAA	C
ATOH	3343	CB	VAL	353	47.759	55.540	44.911	1.00	45.01	AAAA	C
ATOH	3344	CG1	VAL	353	47.766	55.261	46.387	1.00	30.84	AAAA	C
ATOH	3345	CG2	VAL	353	48.988	54.844	44.310	1.00	42.55	AAAA	C
ATOH	3346	C	VAL	353	46.829	54.233	42.957	1.00	41.41	AAAA	C
ATOH	3347	O	VAL	353	46.843	53.003	43.172	1.00	39.19	AAAA	O
ATOH	3348	H	VAL	354	47.074	54.855	41.816	1.00	36.31	AAAA	H
ATOH	3350	CA	VAL	354	47.586	54.092	40.651	1.00	43.97	AAAA	C
ATOH	3351	CB	VAL	354	46.725	54.390	39.407	1.00	40.86	AAAA	C
ATOH	3352	CG1	VAL	354	47.347	53.896	38.123	1.00	36.72	AAAA	C
ATOH	3353	CG2	VAL	354	45.293	53.849	39.678	1.00	35.35	AAAA	C
ATOH	3354	C	VAL	354	49.043	54.510	40.388	1.00	44.56	AAAA	C
ATOH	3355	O	VAL	354	49.366	55.718	40.288	1.00	43.32	AAAA	O
ATOH	3356	H	THR	355	49.972	53.561	40.431	1.00	43.83	AAAA	H
ATOH	3358	CA	THR	355	51.392	53.914	40.284	1.00	44.85	AAAA	C
ATOH	3359	CB	THR	355	52.374	52.799	40.653	1.00	42.40	AAAA	C
ATOH	3360	CG1	THR	355	52.273	51.744	39.695	1.00	45.30	AAAA	O
ATOH	3362	CG2	THR	355	52.210	52.194	42.039	1.00	38.13	AAAA	C
ATOH	3363	C	THR	355	51.746	54.339	38.851	1.00	43.84	AAAA	C
ATOH	3364	O	THR	355	52.463	55.334	38.697	1.00	44.26	AAAA	O
ATOH	3365	H	GLY	356	51.127	53.704	37.870	1.00	41.16	AAAA	H
ATOH	3367	CA	GLY	356	51.358	54.073	36.470	1.00	37.91	AAAA	C
ATOH	3368	C	GLY	356	50.505	55.204	35.955	1.00	38.07	AAAA	C
ATOH	3369	O	GLY	356	50.364	56.261	36.615	1.00	34.65	AAAA	O
ATOH	3370	H	TYR	357	49.910	55.004	34.806	1.00	38.47	AAAA	H
ATOH	3372	CA	TYR	357	48.982	55.973	34.205	1.00	38.03	AAAA	C
ATOH	3373	CB	TYR	357	49.557	56.343	32.835	1.00	31.44	AAAA	C
ATOH	3374	CG	TYR	357	49.473	55.219	31.812	1.00	33.04	AAAA	C
ATOH	3375	CD1	TYR	357	48.333	54.842	31.077	1.00	32.80	AAAA	C
ATOH	3376	CE1	TYR	357	48.352	53.779	30.175	1.00	32.83	AAAA	C
ATOH	3377	CD2	TYR	357	50.639	54.465	31.606	1.00	34.28	AAAA	C
ATOH	3378	CE2	TYR	357	50.706	53.402	30.720	1.00	32.51	AAAA	C
ATOH	3379	CG	TYR	357	49.552	53.068	30.007	1.00	37.26	AAAA	C
ATOH	3380	CD	TYR	357	49.726	51.997	29.166	1.00	35.85	AAAA	O
ATOH	3382	C	TYR	357	47.582	55.368	34.150	1.00	38.55	AAAA	C
ATOH	3383	O	TYR	357	47.458	54.127	34.080	1.00	36.11	AAAA	O
ATOH	3384	H	VAL	358	46.593	56.216	33.814	1.00	40.98	AAAA	H
ATOH	3386	CA	VAL	358	45.197	55.798	33.639	1.00	38.90	AAAA	C
ATOH	3387	CB	VAL	358	44.211	56.502	34.610	1.00	49.15	AAAA	C
ATOH	3388	CG1	VAL	358	42.815	55.883	34.484	1.00	33.12	AAAA	C
ATOH	3389	CG2	VAL	358	44.748	56.437	36.043	1.00	29.20	AAAA	C
ATOH	3390	C	VAL	358	44.760	56.194	32.234	1.00	35.64	AAAA	C
ATOH	3391	O	VAL	358	44.792	57.358	31.089	1.00	34.58	AAAA	O
ATOH	3392	H	LYS	359	44.387	55.188	31.461	1.00	36.00	AAAA	H
ATOH	3394	CA	LYS	359	43.999	55.410	30.117	1.00	41.27	AAAA	C
ATOH	3395	CB	LYS	359	44.845	54.707	29.174	1.00	37.40	AAAA	C
ATOH	3396	CG	LYS	359	44.340	54.473	27.770	1.00	45.19	AAAA	C
ATOH	3397	CD	LYS	359	45.040	55.317	26.750	1.00	43.40	AAAA	C
ATOH	3398	CE	LYS	359	45.958	54.402	25.986	1.00	43.56	AAAA	C
ATOH	3399	CD	LYS	359	45.416	53.937	24.680	1.00	47.98	AAAA	H
ATOH	3403	C	LYS	359	42.423	54.979	29.939	1.00	42.14	AAAA	C
ATOH	3404	O	LYS	359	42.056	53.791	30.066	1.00	40.40	AAAA	O
ATOH	3405	H	ILE	360	41.602	55.974	29.572	1.00	37.16	AAAA	H
ATOH	3407	CA	ILE	360	40.164	55.742	29.334	1.00	40.02	AAAA	C
ATOH	3408	CB	ILE	360	39.297	56.804	30.046	1.00	38.10	AAAA	C
ATOH	3409	CG2	ILE	360	37.887	56.277	29.232	1.00	39.42	AAAA	C
ATOH	3410	CG1	ILE	360	39.769	57.111	31.481	1.00	28.54	AAAA	C
ATOH	3411	CD1	ILE	360	39.423	56.037	32.491	1.00	33.16	AAAA	C
ATOH	3412	C	ILE	360	39.988	55.837	27.834	1.00	39.49	AAAA	C

00555555-0030001

ATOH	3413	O	ILE	360	40.014	55.942	27.235	1.00	37.32	AAAA	O
ATOH	3414	H	ARG	361	39.567	54.721	27.221	1.00	31.34	AAAA	H
ATOH	3416	CA	ARG	361	39.472	54.782	25.744	1.00	41.24	AAAA	C
ATOH	3417	CB	ARG	361	40.783	54.213	25.148	1.00	47.92	AAAA	C
ATOH	3418	CG	ARG	361	40.805	54.203	23.646	1.00	50.39	AAAA	C
ATOH	3419	CO	ARG	361	41.943	53.357	23.116	1.00	51.36	AAAA	C
ATOH	3420	HE	ARG	361	41.473	51.974	23.263	1.00	50.97	AAAA	H
ATOH	3422	CG	ARG	361	42.297	50.962	23.490	1.00	55.79	AAAA	C
ATOH	3423	HH1	ARG	361	43.512	51.074	23.616	1.00	51.62	AAAA	H
ATOH	3426	HH2	ARG	361	41.834	49.719	23.631	1.00	54.52	AAAA	H
ATOH	3429	C	ARG	361	38.382	53.866	25.246	1.00	42.06	AAAA	C
ATOH	3430	O	ARG	361	39.338	52.661	25.499	1.00	39.93	AAAA	O
ATOH	3431	H	HIS	362	37.514	54.342	24.373	1.00	46.19	AAAA	H
ATOH	3433	CA	HIS	362	36.372	53.555	23.885	1.00	49.34	AAAA	C
ATOH	3434	CB	HIS	362	37.000	52.300	23.266	1.00	40.94	AAAA	C
ATOH	3435	CG	HIS	362	37.849	52.610	22.084	1.00	42.78	AAAA	C
ATOH	3436	CO	HIS	362	38.049	53.765	21.411	1.00	48.32	AAAA	C
ATOH	3437	HD1	HIS	362	38.628	51.676	21.469	1.00	43.59	AAAA	H
ATOH	3439	CH1	HIS	362	39.256	52.247	20.465	1.00	46.01	AAAA	C
ATOH	3440	HE2	HIS	362	38.923	53.515	20.408	1.00	49.22	AAAA	H
ATOH	3442	C	HIS	362	35.295	53.113	24.913	1.00	50.32	AAAA	C
ATOH	3443	O	HIS	362	34.686	52.030	24.795	1.00	41.31	AAAA	O
ATOH	3444	H	SER	363	35.222	53.875	26.013	1.00	46.96	AAAA	H
ATOH	3446	CA	SER	363	34.402	53.456	27.139	1.00	52.19	AAAA	C
ATOH	3447	CB	SER	363	35.231	53.837	28.400	1.00	53.73	AAAA	C
ATOH	3448	CG	SER	363	35.713	52.558	28.816	1.00	41.72	AAAA	C
ATOH	3450	C	SER	363	33.005	54.072	27.046	1.00	49.09	AAAA	C
ATOH	3451	O	SER	363	32.653	53.040	27.694	1.00	37.49	AAAA	O
ATOH	3452	H	HIS	364	32.243	53.577	26.058	1.00	52.25	AAAA	H
ATOH	3454	CA	HIS	364	30.954	54.173	25.717	1.00	53.66	AAAA	C
ATOH	3455	C	HIS	364	29.879	53.937	26.760	1.00	48.77	AAAA	C
ATOH	3456	O	HIS	364	29.297	54.899	27.280	1.00	51.44	AAAA	C
ATOH	3457	CB	HIS	364	30.485	53.699	24.384	1.00	49.83	AAAA	C
ATOH	3458	CG	HIS	364	31.493	54.182	23.338	1.00	51.51	AAAA	C
ATOH	3459	HD1	HIS	364	31.870	55.502	23.156	1.00	44.83	AAAA	H
ATOH	3460	CG1	HIS	364	32.708	55.533	22.214	1.00	28.57	AAAA	C
ATOH	3461	CD2	HIS	364	32.194	53.393	22.472	1.00	38.62	AAAA	C
ATOH	3462	HE2	HIS	364	32.992	54.274	21.810	1.00	41.44	AAAA	H
ATOH	3464	H	ALA	365	29.949	52.819	27.427	1.00	47.53	AAAA	H
ATOH	3466	CA	ALA	365	29.211	52.488	28.621	1.00	44.41	AAAA	C
ATOH	3467	CB	ALA	365	29.678	51.133	29.150	1.00	40.28	AAAA	C
ATOH	3468	C	ALA	365	29.318	53.473	29.768	1.00	44.70	AAAA	C
ATOH	3469	O	ALA	365	28.576	53.206	30.726	1.00	45.28	AAAA	O
ATOH	3470	H	LEU	366	30.158	54.517	29.762	1.00	40.80	AAAA	H
ATOH	3472	CA	LEU	366	30.415	55.243	30.968	1.00	42.21	AAAA	C
ATOH	3473	CB	LEU	366	31.885	55.241	31.350	1.00	43.78	AAAA	C
ATOH	3474	CG	LEU	366	32.740	54.037	31.667	1.00	51.52	AAAA	C
ATOH	3475	CD1	LEU	366	34.192	54.373	32.043	1.00	51.77	AAAA	C
ATOH	3476	CD2	LEU	366	32.118	53.305	32.834	1.00	51.17	AAAA	C
ATOH	3477	H	LEU	366	29.974	56.687	30.896	1.00	46.36	AAAA	C
ATOH	3478	O	LEU	366	30.305	57.248	29.849	1.00	48.40	AAAA	O
ATOH	3479	H	VAL	367	29.521	57.275	32.015	1.00	43.68	AAAA	H
ATOH	3481	CA	VAL	367	29.072	58.675	31.940	1.00	44.18	AAAA	C
ATOH	3482	CB	VAL	367	27.557	58.727	32.376	1.00	48.80	AAAA	C
ATOH	3483	CG1	VAL	367	26.923	60.073	32.571	1.00	41.69	AAAA	C
ATOH	3484	CG2	VAL	367	26.697	57.949	31.365	1.00	34.00	AAAA	C
ATOH	3485	C	VAL	367	29.923	59.518	32.845	1.00	44.90	AAAA	C
ATOH	3486	O	VAL	367	29.965	60.751	32.720	1.00	44.75	AAAA	O
ATOH	3487	H	SER	368	30.591	58.818	33.757	1.00	48.72	AAAA	H
ATOH	3489	CA	SER	368	31.487	59.465	34.742	1.00	52.70	AAAA	C
ATOH	3490	CB	SER	368	30.658	59.706	36.000	1.00	55.32	AAAA	C
ATOH	3491	CG	SER	368	31.300	60.298	37.091	1.00	64.86	AAAA	C
ATOH	3493	C	SER	368	32.590	58.497	35.179	1.00	52.76	AAAA	C
ATOH	3494	O	SER	368	32.352	57.299	34.976	1.00	48.99	AAAA	O
ATOH	3495	H	LEU	369	33.631	59.012	35.831	1.00	53.86	AAAA	H
ATOH	3497	CA	LEU	369	34.716	58.129	36.274	1.00	60.15	AAAA	C
ATOH	3498	CB	LEU	369	36.073	58.630	35.784	1.00	55.91	AAAA	C
ATOH	3499	CG	LEU	369	36.325	58.736	34.271	1.00	45.96	AAAA	C
ATOH	3500	CD1	LEU	369	37.369	59.428	34.154	1.00	53.97	AAAA	C
ATOH	3501	CD2	LEU	369	36.207	57.384	33.619	1.00	39.77	AAAA	C
ATOH	3502	C	LEU	369	34.645	58.036	37.811	1.00	62.52	AAAA	C
ATOH	3503	O	LEU	369	35.569	57.700	38.595	1.00	59.33	AAAA	O
ATOH	3504	H	SER	370	33.437	58.401	38.285	1.00	56.26	AAAA	H
ATOH	3506	CA	SER	370	33.089	58.431	39.690	1.00	53.88	AAAA	C
ATOH	3507	CB	SER	370	31.673	59.052	39.816	1.00	57.56	AAAA	C
ATOH	3508	CG	SER	370	30.771	58.061	39.261	1.00	69.12	AAAA	C
ATOH	3510	C	SER	370	33.060	57.085	40.412	1.00	47.97	AAAA	C
ATOH	3511	O	SER	370	33.228	56.943	41.596	1.00	41.93	AAAA	O
ATOH	3512	H	PHE	371	32.967	55.936	39.792	1.00	45.48	AAAA	H
ATOH	3514	CA	PHE	371	33.223	54.643	40.356	1.00	46.29	AAAA	C
ATOH	3515	CB	PHE	371	32.952	53.596	39.297	1.00	43.53	AAAA	C
ATOH	3516	CG	PHE	371	33.724	53.629	38.012	1.00	56.45	AAAA	C
ATOH	3517	CD1	PHE	371	34.805	52.807	37.764	1.00	58.95	AAAA	C
ATOH	3518	CD2	PHE	371	33.371	54.515	37.004	1.00	53.92	AAAA	C
ATOH	3519	CE1	PHE	371	35.498	52.842	36.570	1.00	59.56	AAAA	C

35/58

ATOH	3520	CE2	PHE	371	34.948	54.516	35.817	1.00	56.42	AAAA	C
ATOH	3521	CC	PHE	371	35.119	53.716	35.579	1.00	56.39	AAAA	C
ATOH	3522	C	PHE	371	34.654	54.467	40.895	1.00	54.84	AAAA	C
ATOH	3523	O	PHE	371	35.005	53.592	41.728	1.00	52.23	AAAA	O
ATOH	3524	II	LEU	372	35.633	55.305	40.510	1.00	50.17	AAAA	II
ATOH	3526	CA	LEU	372	36.928	55.395	41.109	1.00	46.25	AAAA	C
ATOH	3527	CB	LEU	372	38.171	55.812	40.276	1.00	44.82	AAAA	C
ATOH	3528	CG	LEU	372	38.411	54.800	39.114	1.00	36.78	AAAA	C
ATOH	3529	CD1	LEU	372	38.853	55.643	37.934	1.00	45.04	AAAA	C
ATOH	3530	CD2	LEU	372	39.260	53.657	39.565	1.00	35.55	AAAA	C
ATOH	3531	C	LEU	372	36.715	56.392	42.213	1.00	42.26	AAAA	C
ATOH	3532	O	LEU	372	37.224	57.507	42.364	1.00	39.37	AAAA	O
ATOH	3533	II	LYS	373	35.970	55.862	43.122	1.00	47.06	AAAA	II
ATOH	3535	CA	LYS	373	35.527	56.509	44.415	1.00	50.19	AAAA	C
ATOH	3536	CB	LYS	373	34.546	55.521	45.077	1.00	56.74	AAAA	C
ATOH	3537	CG	LYS	373	33.645	56.162	46.119	1.00	59.64	AAAA	C
ATOH	3538	CD	LYS	373	32.529	56.955	45.441	0.01	60.17	AAAA	C
ATOH	3539	CE	LYS	373	31.674	57.687	46.460	0.01	60.45	AAAA	C
ATOH	3540	IC	LYS	373	31.083	58.933	45.899	0.01	60.38	AAAA	II
ATOH	3544	C	LYS	373	36.646	56.863	45.366	1.00	49.72	AAAA	C
ATOH	3545	O	LYS	373	36.636	57.960	45.907	1.00	42.42	AAAA	O
ATOH	3546	II	ASN	374	37.657	55.986	45.513	1.00	54.43	AAAA	II
ATOH	3548	CA	ASN	374	38.765	56.352	46.410	1.00	59.92	AAAA	C
ATOH	3549	CB	ASN	374	39.080	55.154	47.314	1.00	63.16	AAAA	C
ATOH	3550	CG	ASN	374	38.009	54.978	48.396	1.00	64.53	AAAA	C
ATOH	3551	OD1	ASN	374	37.892	53.972	49.096	1.00	66.40	AAAA	O
ATOH	3552	OD2	ASN	374	37.160	55.965	48.578	1.00	52.88	AAAA	II
ATOH	3555	C	ASN	374	40.043	56.892	45.786	1.00	62.35	AAAA	C
ATOH	3556	O	ASN	374	41.031	57.223	46.479	1.00	63.08	AAAA	O
ATOH	3557	II	LEU	375	40.991	56.893	44.438	1.00	58.34	AAAA	II
ATOH	3559	CA	LEU	375	41.305	57.374	43.795	1.00	54.73	AAAA	C
ATOH	3560	CB	LEU	375	41.099	57.359	42.288	1.00	56.41	AAAA	C
ATOH	3561	CG	LEU	375	42.396	57.422	41.459	1.00	54.12	AAAA	C
ATOH	3562	CD1	LEU	375	43.135	56.112	41.689	1.00	37.88	AAAA	C
ATOH	3563	CD2	LEU	375	42.030	57.796	40.041	1.00	40.97	AAAA	C
ATOH	3564	C	LEU	375	41.712	58.754	44.245	1.00	52.37	AAAA	C
ATOH	3565	O	LEU	375	41.151	59.777	43.877	1.00	52.11	AAAA	O
ATOH	3566	II	ARG	376	42.801	58.874	44.982	1.00	55.16	AAAA	II
ATOH	3568	CA	ARG	376	43.320	60.155	45.434	1.00	55.45	AAAA	C
ATOH	3569	CB	ARG	376	43.706	60.222	46.928	1.00	58.68	AAAA	C
ATOH	3570	CG	ARG	376	44.288	58.907	47.415	1.00	69.10	AAAA	C
ATOH	3571	CD	ARG	376	44.286	58.817	48.944	1.00	81.17	AAAA	C
ATOH	3572	IE	ARG	376	45.377	57.926	49.410	1.00	84.46	AAAA	II
ATOH	3574	CC	ARG	376	46.618	58.380	49.598	1.00	85.64	AAAA	C
ATOH	3575	III1	ARG	376	46.966	59.645	49.383	1.00	81.84	AAAA	II
ATOH	3578	III2	ARG	376	47.571	57.549	50.012	1.00	94.15	AAAA	II
ATOH	3581	C	ARG	376	44.556	60.544	44.633	1.00	50.16	AAAA	C
ATOH	3582	O	ARG	376	44.746	61.728	44.465	1.00	44.25	AAAA	O
ATOH	3583	II	LEU	377	45.375	59.578	44.219	1.00	50.99	AAAA	II
ATOH	3585	CA	LEU	377	46.526	59.942	43.379	1.00	49.40	AAAA	C
ATOH	3586	CB	LEU	377	47.595	60.411	44.329	1.00	64.72	AAAA	C
ATOH	3587	CG	LEU	377	48.806	59.577	44.667	1.00	70.76	AAAA	C
ATOH	3588	CD1	LEU	377	50.031	60.157	43.954	1.00	63.32	AAAA	C
ATOH	3589	CD2	LEU	377	49.010	59.696	46.179	1.00	68.60	AAAA	C
ATOH	3590	C	LEU	377	47.043	59.022	42.311	1.00	46.33	AAAA	C
ATOH	3591	O	LEU	377	46.868	57.780	42.286	1.00	45.17	AAAA	O
ATOH	3592	II	ILE	378	47.448	59.675	41.199	1.00	45.12	AAAA	II
ATOH	3594	CA	ILE	378	48.042	58.976	40.042	1.00	49.10	AAAA	C
ATOH	3595	CB	ILE	378	47.342	59.303	38.724	1.00	46.36	AAAA	C
ATOH	3596	CG2	ILE	378	48.115	58.696	37.574	1.00	34.36	AAAA	C
ATOH	3597	CG1	ILE	378	45.871	58.862	38.829	1.00	38.59	AAAA	C
ATOH	3598	CD1	ILE	378	44.999	59.515	37.765	1.00	37.18	AAAA	C
ATOH	3599	C	ILE	378	49.524	59.381	40.003	1.00	49.87	AAAA	C
ATOH	3600	O	ILE	378	49.801	60.595	40.040	1.00	44.72	AAAA	O
ATOH	3601	II	LEU	379	50.454	58.423	40.067	1.00	49.97	AAAA	II
ATOH	3603	CA	LEU	379	51.866	58.712	40.344	1.00	48.48	AAAA	C
ATOH	3604	CB	LEU	379	52.575	57.531	41.054	1.00	48.44	AAAA	C
ATOH	3605	CG	LEU	379	52.234	57.363	42.554	1.00	50.28	AAAA	C
ATOH	3606	CD1	LEU	379	52.926	56.187	43.217	1.00	39.89	AAAA	C
ATOH	3607	CD2	LEU	379	52.616	58.625	43.300	1.00	42.89	AAAA	C
ATOH	3608	C	LEU	379	52.609	59.019	39.080	1.00	50.94	AAAA	C
ATOH	3609	O	LEU	379	53.576	59.788	39.139	1.00	54.23	AAAA	O
ATOH	3610	II	GLY	380	52.175	58.423	37.972	1.00	48.67	AAAA	II
ATOH	3612	CA	GLY	380	52.931	58.715	36.702	1.00	49.94	AAAA	C
ATOH	3613	C	GLY	380	54.249	58.155	36.624	1.00	52.70	AAAA	C
ATOH	3614	O	GLY	380	55.026	58.657	35.803	1.00	49.94	AAAA	O
ATOH	3615	II	GLU	381	54.549	57.033	37.272	1.00	52.51	AAAA	II
ATOH	3617	CA	GLU	381	55.849	56.386	37.243	1.00	52.33	AAAA	C
ATOH	3618	CB	GLU	381	56.055	55.310	38.323	1.00	45.22	AAAA	C
ATOH	3619	CG	GLU	381	55.402	55.779	39.636	1.00	52.91	AAAA	C
ATOH	3620	CD	GLU	381	56.350	55.192	40.873	1.00	42.11	AAAA	C
ATOH	3621	OE1	GLU	381	56.160	53.966	40.890	1.00	40.26	AAAA	O
ATOH	3622	OE2	GLU	381	56.379	56.014	41.751	1.00	51.32	AAAA	O
ATOH	3623	C	GLU	381	56.078	55.784	35.859	1.00	55.86	AAAA	C
ATOH	3624	O	GLU	381	57.216	55.652	35.345	1.00	54.61	AAAA	O

09/555275-0030004

36/58

ATOH	3625	H	GLU	382	54.980	55.449	35.157	1.00	53.50	AAAA	H
ATOH	3627	CA	GLU	382	55.091	55.018	33.766	1.00	48.15	AAAA	C
ATOH	3628	CB	GLU	382	55.051	53.550	33.532	1.00	35.27	AAAA	C
ATOH	3629	CG	GLU	382	54.739	53.225	32.051	1.00	49.69	AAAA	C
ATOH	3630	CD	GLU	382	54.676	51.719	31.007	1.00	56.45	AAAA	C
ATOH	3631	OE1	GLU	382	55.062	50.924	32.705	1.00	61.66	AAAA	O
ATOH	3632	OE2	GLU	382	54.264	51.201	30.745	1.00	57.69	AAAA	O
ATOH	3633	C	GLU	382	54.006	55.732	32.973	1.00	50.84	AAAA	C
ATOH	3634	O	GLU	382	53.097	56.282	33.598	1.00	49.44	AAAA	O
ATOH	3635	H	GLU	383	54.347	56.256	31.780	1.00	52.25	AAAA	H
ATOH	3637	CA	GLU	383	53.498	57.153	31.016	1.00	40.15	AAAA	C
ATOH	3638	CB	GLU	383	53.914	58.609	31.155	1.00	28.50	AAAA	C
ATOH	3639	CG	GLU	383	54.489	58.909	32.542	1.00	31.10	AAAA	C
ATOH	3640	CD	GLU	383	54.950	60.301	32.752	1.00	33.19	AAAA	C
ATOH	3641	OE1	GLU	383	55.186	60.840	31.683	1.00	40.34	AAAA	O
ATOH	3642	OE2	GLU	383	55.043	60.943	33.934	1.00	36.30	AAAA	H
ATOH	3645	C	GLU	385	53.426	56.744	29.563	1.00	40.45	AAAA	C
ATOH	3646	O	GLU	385	54.131	55.858	29.139	1.00	43.45	AAAA	O
ATOH	3647	H	LEU	384	52.375	57.195	28.860	1.00	42.54	AAAA	H
ATOH	3649	CA	LEU	384	52.257	56.889	27.443	1.00	43.24	AAAA	C
ATOH	3650	CB	LEU	384	50.814	57.011	26.949	1.00	43.79	AAAA	C
ATOH	3651	CG	LEU	384	49.818	56.235	27.861	1.00	41.21	AAAA	C
ATOH	3652	CD1	LEU	384	48.611	57.095	28.221	1.00	33.99	AAAA	C
ATOH	3653	CD2	LEU	384	49.405	54.968	27.149	1.00	33.20	AAAA	C
ATOH	3654	C	LEU	384	53.204	57.809	26.672	1.00	40.51	AAAA	C
ATOH	3655	O	LEU	384	53.582	58.872	27.177	1.00	29.66	AAAA	O
ATOH	3656	H	GLU	385	53.659	57.319	25.531	1.00	45.22	AAAA	H
ATOH	3658	CA	GLU	385	54.410	58.116	24.570	1.00	49.98	AAAA	C
ATOH	3659	CB	GLU	385	54.424	57.475	23.174	1.00	60.50	AAAA	C
ATOH	3660	CG	GLU	385	55.045	56.095	23.106	1.00	68.76	AAAA	C
ATOH	3661	CD	GLU	385	54.195	54.951	23.592	1.00	72.07	AAAA	C
ATOH	3662	OE1	GLU	385	53.150	55.213	24.244	1.00	81.88	AAAA	O
ATOH	3663	OE2	GLU	385	54.565	53.786	23.301	1.00	73.13	AAAA	O
ATOH	3664	C	GLU	385	53.828	59.515	24.450	1.00	47.41	AAAA	C
ATOH	3665	O	GLU	385	52.635	59.706	24.184	1.00	54.43	AAAA	O
ATOH	3666	H	GLY	386	54.614	60.470	24.902	1.00	43.69	AAAA	H
ATOH	3668	CA	GLY	386	54.181	61.870	24.897	1.00	40.34	AAAA	C
ATOH	3669	C	GLY	386	54.286	62.449	26.308	1.00	40.65	AAAA	C
ATOH	3670	O	GLY	386	53.930	63.615	26.491	1.00	39.75	AAAA	O
ATOH	3671	H	ASH	387	54.441	61.537	27.272	1.00	40.75	AAAA	H
ATOH	3673	CA	ASH	387	54.479	61.912	28.675	1.00	49.18	AAAA	C
ATOH	3674	CB	ASH	387	55.500	63.084	28.874	1.00	44.41	AAAA	C
ATOH	3675	CG	ASH	387	56.925	62.541	28.722	1.00	61.51	AAAA	C
ATOH	3676	OD1	ASH	387	57.199	61.313	28.677	1.00	57.85	AAAA	O
ATOH	3677	OD2	ASH	387	58.063	63.251	28.592	1.00	61.96	AAAA	H
ATOH	3680	C	ASH	387	53.095	62.100	29.299	1.00	48.46	AAAA	C
ATOH	3681	O	ASH	387	52.836	62.891	30.218	1.00	48.99	AAAA	O
ATOH	3682	H	TYR	388	52.214	61.116	29.058	1.00	46.29	AAAA	H
ATOH	3684	CA	TYR	388	50.846	61.199	29.540	1.00	45.09	AAAA	C
ATOH	3685	CB	TYR	388	49.823	60.957	28.399	1.00	40.70	AAAA	C
ATOH	3686	CG	TYR	388	49.925	62.056	27.373	1.00	42.24	AAAA	C
ATOH	3687	CD1	TYR	388	50.313	61.854	26.064	1.00	44.39	AAAA	C
ATOH	3688	CE1	TYR	388	50.401	62.885	25.157	1.00	35.51	AAAA	C
ATOH	3689	CD2	TYR	388	49.625	63.356	27.709	1.00	44.67	AAAA	C
ATOH	3690	CE2	TYR	388	49.699	64.428	26.830	1.00	38.14	AAAA	C
ATOH	3691	CE	TYR	388	50.087	64.148	25.555	1.00	41.27	AAAA	C
ATOH	3692	OH	TYR	388	50.151	65.181	24.604	1.00	50.18	AAAA	O
ATOH	3694	C	TYR	388	50.563	60.288	30.714	1.00	41.88	AAAA	C
ATOH	3695	O	TYR	388	50.727	59.092	30.511	1.00	32.99	AAAA	O
ATOH	3696	H	SER	389	50.020	60.917	31.753	1.00	45.42	AAAA	H
ATOH	3698	CA	SER	389	49.591	60.131	32.931	1.00	50.13	AAAA	C
ATOH	3699	CB	SER	389	49.798	60.894	34.261	1.00	45.57	AAAA	C
ATOH	3700	CG	SER	389	51.195	60.899	34.504	1.00	51.11	AAAA	O
ATOH	3702	C	SER	389	48.097	59.813	32.804	1.00	48.11	AAAA	C
ATOH	3703	O	SER	389	47.686	58.792	33.336	1.00	49.25	AAAA	O
ATOH	3704	H	PHE	390	47.321	60.685	32.196	1.00	42.56	AAAA	H
ATOH	3706	CA	PHE	390	45.867	60.595	32.146	1.00	40.76	AAAA	C
ATOH	3707	CB	PHE	390	45.241	61.581	33.139	1.00	44.80	AAAA	C
ATOH	3708	CG	PHE	390	43.764	61.358	33.328	1.00	40.53	AAAA	C
ATOH	3709	CD1	PHE	390	43.406	60.273	24.089	1.00	40.80	AAAA	C
ATOH	3710	CD2	PHE	390	42.769	62.157	32.748	1.00	35.59	AAAA	C
ATOH	3711	CE1	PHE	390	42.050	59.985	34.312	1.00	47.09	AAAA	C
ATOH	3712	CE2	PHE	390	41.454	61.824	32.965	1.00	44.50	AAAA	C
ATOH	3713	CE	PHE	390	41.063	60.745	33.739	1.00	34.54	AAAA	C
ATOH	3714	C	PHE	390	45.372	60.829	30.720	1.00	38.54	AAAA	C
ATOH	3715	O	PHE	390	45.542	61.918	30.126	1.00	40.29	AAAA	O
ATOH	3716	H	TYR	391	44.819	59.818	30.096	1.00	33.48	AAAA	H
ATOH	3718	CA	TYR	391	44.596	59.782	28.663	1.00	38.58	AAAA	C
ATOH	3719	CB	TYR	391	45.579	58.871	27.972	1.00	38.95	AAAA	C
ATOH	3720	CG	TYR	391	45.760	59.006	26.503	1.00	44.54	AAAA	C
ATOH	3721	CD1	TYR	391	46.822	59.815	26.052	1.00	47.14	AAAA	C
ATOH	3722	CE1	TYR	391	47.357	59.993	24.722	1.00	46.03	AAAA	C
ATOH	3723	CE2	TYR	391	44.927	58.390	25.584	1.00	46.94	AAAA	C
ATOH	3724	CE	TYR	391	45.157	58.560	24.242	1.00	47.45	AAAA	C
ATOH	3725	CE	TYR	391	46.207	59.356	23.830	1.00	45.84	AAAA	C

P00000-000001

37/58

ATOH	3726	CH	TFR	391	46.374	59.492	22.491	1.00	44.73	AAAA	O
ATOH	3728	O	TFR	391	43.194	59.232	28.349	1.00	39.74	AAAA	C
ATOH	3729	O	TFR	391	42.841	59.103	28.730	1.00	38.49	AAAA	O
ATOH	3730	H	VAL	392	42.417	60.158	27.772	1.00	37.07	AAAA	H
ATOH	3732	CA	VAL	392	40.958	59.874	27.603	1.00	39.52	AAAA	C
ATOH	3733	CB	VAL	392	40.075	60.880	28.440	1.00	41.12	AAAA	C
ATOH	3734	CS1	VAL	392	38.612	60.464	28.472	1.00	37.96	AAAA	C
ATOH	3735	CS2	VAL	392	40.666	61.041	29.841	1.00	33.19	AAAA	C
ATOH	3736	C	VAL	392	40.531	60.092	26.182	1.00	31.08	AAAA	C
ATOH	3737	O	VAL	392	40.508	61.277	25.904	1.00	34.71	AAAA	O
ATOH	3738	H	LEU	393	40.299	59.113	25.383	1.00	34.62	AAAA	H
ATOH	3740	CA	LEU	393	39.948	59.259	23.977	1.00	38.12	AAAA	C
ATOH	3741	CB	LEU	393	41.200	59.036	23.096	1.00	42.49	AAAA	C
ATOH	3742	CG	LEU	393	41.023	58.649	21.585	1.00	26.48	AAAA	C
ATOH	3743	CD1	LEU	393	41.128	59.879	20.753	1.00	26.57	AAAA	C
ATOH	3744	CD2	LEU	393	42.078	57.589	21.244	1.00	29.99	AAAA	C
ATOH	3745	C	LEU	393	38.821	58.375	23.482	1.00	39.15	AAAA	C
ATOH	3746	O	LEU	393	38.760	57.173	23.799	1.00	37.90	AAAA	O
ATOH	3747	H	ASP	394	38.015	58.973	22.505	1.00	43.39	AAAA	H
ATOH	3749	CA	ASP	394	36.988	59.215	21.075	1.00	44.77	AAAA	C
ATOH	3750	CB	ASP	394	37.445	57.073	21.129	1.00	44.80	AAAA	C
ATOH	3751	CG	ASP	394	36.466	56.477	20.155	1.00	47.14	AAAA	C
ATOH	3752	CD1	ASP	394	36.750	55.577	19.333	1.00	52.81	AAAA	O
ATOH	3753	CD2	ASP	394	35.311	56.948	20.180	1.00	49.27	AAAA	O
ATOH	3754	C	ASP	394	35.936	57.619	23.021	1.00	43.17	AAAA	C
ATOH	3755	O	ASP	394	35.831	56.385	23.212	1.00	43.51	AAAA	O
ATOH	3756	H	ASH	395	35.299	58.495	23.745	1.00	39.90	AAAA	H
ATOH	3758	CA	ASH	395	34.305	58.158	24.776	1.00	46.32	AAAA	C
ATOH	3759	CB	ASH	395	34.804	58.512	26.212	1.00	42.95	AAAA	C
ATOH	3760	CG	ASH	395	35.992	57.619	23.579	1.00	36.92	AAAA	C
ATOH	3761	OD1	ASH	395	36.013	56.394	26.796	1.00	21.65	AAAA	O
ATOH	3762	OD2	ASH	395	37.075	58.409	26.558	1.00	27.87	AAAA	H
ATOH	3765	C	ASH	395	32.932	58.816	24.541	1.00	40.44	AAAA	C
ATOH	3766	O	ASH	395	32.749	59.982	24.082	1.00	37.06	AAAA	O
ATOH	3767	H	GLN	396	32.073	58.055	23.877	1.00	46.74	AAAA	H
ATOH	3769	CA	GLN	396	30.771	58.582	23.421	1.00	52.93	AAAA	C
ATOH	3770	CB	GLN	396	29.848	57.567	22.744	1.00	52.29	AAAA	C
ATOH	3771	CG	GLN	396	30.173	57.405	21.257	1.00	46.42	AAAA	C
ATOH	3772	CD	GLN	396	29.817	55.991	20.840	1.00	55.21	AAAA	C
ATOH	3773	OE1	GLN	396	28.835	55.421	21.312	1.00	61.17	AAAA	O
ATOH	3774	HE2	GLN	396	30.628	55.411	19.971	1.00	55.79	AAAA	H
ATOH	3777	C	GLN	396	29.874	59.224	24.458	1.00	48.64	AAAA	C
ATOH	3778	O	GLN	396	29.407	60.287	24.113	1.00	51.63	AAAA	O
ATOH	3779	H	ASH	397	29.717	58.681	25.633	1.00	48.95	AAAA	H
ATOH	3781	CA	ASH	397	28.783	59.196	26.632	1.00	51.72	AAAA	C
ATOH	3782	CB	ASH	397	27.969	57.959	27.093	1.00	35.94	AAAA	C
ATOH	3783	CG	ASH	397	27.231	57.430	25.860	1.00	49.09	AAAA	C
ATOH	3784	OD1	ASH	397	26.591	58.304	25.229	1.00	49.32	AAAA	O
ATOH	3785	OD2	ASH	397	27.258	55.175	25.431	1.00	43.31	AAAA	H
ATOH	3788	C	ASH	397	29.367	59.945	27.000	1.00	52.99	AAAA	C
ATOH	3789	O	ASH	397	28.586	60.344	28.627	1.00	33.33	AAAA	O
ATOH	3790	H	LEU	398	30.682	59.990	28.001	1.00	55.73	AAAA	H
ATOH	3792	CA	LEU	398	31.312	60.550	29.179	1.00	52.12	AAAA	C
ATOH	3793	CB	LEU	398	32.927	60.389	29.148	1.00	48.47	AAAA	C
ATOH	3794	CG	LEU	398	33.606	60.283	30.460	1.00	41.81	AAAA	C
ATOH	3795	CD1	LEU	398	33.417	58.939	31.135	1.00	40.35	AAAA	C
ATOH	3796	CD2	LEU	398	35.070	60.608	30.082	1.00	39.03	AAAA	C
ATOH	3797	C	LEU	398	30.923	61.995	29.353	1.00	52.35	AAAA	C
ATOH	3798	O	LEU	398	31.422	62.909	28.681	1.00	49.91	AAAA	O
ATOH	3799	H	GLN	399	30.241	62.225	30.409	1.00	58.76	AAAA	H
ATOH	3801	CA	GLN	399	29.688	63.558	30.796	1.00	60.03	AAAA	C
ATOH	3802	CB	GLN	399	28.236	63.331	31.262	1.00	59.55	AAAA	C
ATOH	3803	CG	GLN	399	27.235	63.962	30.316	1.00	73.07	AAAA	C
ATOH	3804	CD	GLN	399	25.944	63.146	30.340	1.00	78.39	AAAA	C
ATOH	3805	OE1	GLN	399	25.097	63.455	31.194	1.00	71.79	AAAA	O
ATOH	3806	HE2	GLN	399	25.856	62.158	29.440	1.00	69.88	AAAA	H
ATOH	3809	C	GLN	399	30.490	64.252	31.809	1.00	54.49	AAAA	C
ATOH	3810	O	GLN	399	30.528	65.477	32.068	1.00	51.96	AAAA	O
ATOH	3811	H	GLN	400	31.058	63.389	32.734	1.00	50.44	AAAA	H
ATOH	3813	CA	GLN	400	31.938	63.948	33.756	1.00	53.83	AAAA	C
ATOH	3814	CB	GLN	400	31.215	64.314	35.040	1.00	54.97	AAAA	C
ATOH	3815	CG	GLN	400	30.717	63.150	35.997	1.00	58.99	AAAA	C
ATOH	3816	CD	GLN	400	30.678	63.430	37.389	1.00	65.82	AAAA	C
ATOH	3817	OE1	GLN	400	30.906	64.502	37.962	1.00	68.10	AAAA	O
ATOH	3818	HE2	GLN	400	30.341	62.444	38.222	1.00	55.35	AAAA	H
ATOH	3821	C	GLN	400	33.113	63.008	34.052	1.00	52.08	AAAA	C
ATOH	3822	O	GLN	400	33.107	61.783	33.942	1.00	51.90	AAAA	O
ATOH	3823	H	LEU	401	34.073	63.580	34.751	1.00	49.58	AAAA	H
ATOH	3825	CA	LEU	401	35.175	62.844	35.334	1.00	49.57	AAAA	C
ATOH	3826	CB	LEU	401	36.379	63.803	35.260	1.00	47.94	AAAA	C
ATOH	3827	CG	LEU	401	36.636	64.237	33.772	1.00	46.61	AAAA	C
ATOH	3828	CD1	LEU	401	37.658	65.326	32.677	1.00	39.09	AAAA	C
ATOH	3829	CD2	LEU	401	36.910	63.060	31.860	1.00	40.72	AAAA	C
ATOH	3930	C	LEU	401	34.866	62.357	36.734	1.00	51.23	AAAA	C
ATOH	3931	O	LEU	401	34.258	61.299	36.892	1.00	49.06	AAAA	O

TOO LOW - 00000

38/58

ATOH	3832	H	TRP	402	35.297	63.140	37.690	1.00	54.58	AAAA	H
ATOH	3834	CA	TRP	402	34.975	63.090	39.097	1.00	59.76	AAAA	C
ATOH	3835	CB	TRP	402	36.279	62.953	39.933	1.00	59.56	AAAA	C
ATOH	3836	CG	TRP	402	36.971	61.624	39.737	1.00	58.17	AAAA	C
ATOH	3837	CD2	TRP	402	37.981	61.243	38.784	1.00	53.18	AAAA	C
ATOH	3838	CE2	TRP	402	38.286	59.897	39.002	1.00	56.61	AAAA	C
ATOH	3839	CE3	TRP	402	38.643	61.917	37.764	1.00	43.25	AAAA	C
ATOH	3840	CD1	TRP	402	36.719	60.517	40.459	1.00	53.50	AAAA	C
ATOH	3841	HE1	TRP	402	37.488	59.467	40.032	1.00	57.66	AAAA	H
ATOH	3843	CE2	TRP	402	39.212	59.160	38.249	1.00	51.44	AAAA	C
ATOH	3844	CE3	TRP	402	39.546	61.199	37.026	1.00	53.69	AAAA	C
ATOH	3845	CH2	TRP	402	39.920	59.857	37.263	1.00	50.75	AAAA	C
ATOH	3846	C	TRP	402	34.223	64.389	39.429	1.00	64.09	AAAA	C
ATOH	3847	O	TRP	402	34.408	65.449	38.808	1.00	61.99	AAAA	O
ATOH	3848	H	ASP	403	33.503	64.418	40.551	1.00	68.85	AAAA	H
ATOH	3850	CA	ASP	403	32.047	65.668	41.068	1.00	67.83	AAAA	C
ATOH	3851	CB	ASP	403	31.918	65.343	42.151	1.00	72.19	AAAA	C
ATOH	3852	CG	ASP	403	30.853	66.417	42.306	1.00	73.08	AAAA	C
ATOH	3853	OD1	ASP	403	31.177	67.625	42.297	1.00	71.67	AAAA	O
ATOH	3854	OD2	ASP	403	29.693	65.979	42.454	1.00	75.08	AAAA	O
ATOH	3855	C	ASP	403	34.065	66.607	41.607	1.00	66.63	AAAA	C
ATOH	3856	O	ASP	403	34.245	66.672	42.811	1.00	67.18	AAAA	O
ATOH	3857	H	TRP	404	34.449	67.588	40.846	1.00	69.29	AAAA	H
ATOH	3859	CA	TRP	404	35.412	68.588	41.291	1.00	77.11	AAAA	C
ATOH	3860	CB	TRP	404	35.859	69.409	40.063	1.00	79.10	AAAA	C
ATOH	3861	CG	TRP	404	36.504	68.509	39.047	1.00	82.59	AAAA	C
ATOH	3862	CD2	TRP	404	37.294	67.346	39.322	1.00	84.82	AAAA	C
ATOH	3863	CE2	TRP	404	37.686	66.813	38.081	1.00	84.56	AAAA	C
ATOH	3864	CE3	TRP	404	37.703	66.710	40.506	1.00	80.95	AAAA	C
ATOH	3865	CD1	TRP	404	36.460	68.622	37.694	1.00	83.37	AAAA	C
ATOH	3866	HE1	TRP	404	37.165	67.617	37.111	1.00	80.33	AAAA	H
ATOH	3868	CE2	TRP	404	38.477	65.662	37.982	1.00	85.91	AAAA	C
ATOH	3869	CE3	TRP	404	38.471	65.573	40.392	1.00	86.36	AAAA	C
ATOH	3870	CH2	TRP	404	38.860	65.051	39.133	1.00	85.05	AAAA	C
ATOH	3871	C	TRP	404	35.034	69.517	42.420	1.00	81.60	AAAA	C
ATOH	3872	O	TRP	404	35.387	70.709	42.504	1.00	84.57	AAAA	O
ATOH	3873	H	ASP	405	34.281	69.063	43.393	1.00	84.45	AAAA	H
ATOH	3875	CA	ASP	405	33.771	69.861	44.496	1.00	87.48	AAAA	C
ATOH	3876	CB	ASP	405	32.352	70.365	44.262	1.00	88.04	AAAA	C
ATOH	3877	CG	ASP	405	32.274	71.612	43.409	1.00	92.54	AAAA	C
ATOH	3878	OD1	ASP	405	33.306	72.285	43.207	1.00	94.82	AAAA	O
ATOH	3879	OD2	ASP	405	31.130	71.854	42.955	1.00	95.26	AAAA	O
ATOH	3880	C	ASP	405	33.730	68.906	45.693	1.00	87.80	AAAA	C
ATOH	3881	O	ASP	405	34.245	69.224	46.743	1.00	92.18	AAAA	O
ATOH	3882	H	ALA	406	33.239	67.709	45.460	1.00	84.46	AAAA	H
ATOH	3884	CA	ALA	406	33.176	66.671	46.451	1.00	82.87	AAAA	C
ATOH	3885	CB	ALA	406	31.943	65.805	46.133	1.00	76.32	AAAA	C
ATOH	3886	C	ALA	406	34.445	65.840	46.459	1.00	85.77	AAAA	C
ATOH	3887	O	ALA	406	34.470	64.823	47.185	1.00	89.38	AAAA	O
ATOH	3888	H	ARG	407	35.433	66.073	45.577	1.00	83.74	AAAA	H
ATOH	3890	CA	ARG	407	36.541	65.151	45.400	1.00	79.60	AAAA	C
ATOH	3891	CB	ARG	407	36.165	64.140	44.297	1.00	77.84	AAAA	C
ATOH	3892	CG	ARG	407	35.457	62.950	44.921	1.00	81.91	AAAA	C
ATOH	3893	CD	ARG	407	35.362	61.688	44.113	1.00	86.97	AAAA	C
ATOH	3894	HE	ARG	407	36.281	60.660	44.607	1.00	86.94	AAAA	H
ATOH	3896	CE	ARG	407	37.564	60.583	44.279	1.00	92.14	AAAA	C
ATOH	3897	HH1	ARG	407	38.169	61.441	43.469	1.00	97.06	AAAA	H
ATOH	3900	HH2	ARG	407	38.309	59.616	44.770	1.00	96.33	AAAA	H
ATOH	3903	C	ARG	407	37.880	65.749	45.048	1.00	76.72	AAAA	C
ATOH	3904	O	ARG	407	37.989	66.774	44.410	1.00	77.47	AAAA	O
ATOH	3905	H	ASN	408	38.958	65.081	45.453	1.00	75.75	AAAA	H
ATOH	3907	CA	ASN	408	40.311	65.556	45.173	1.00	73.79	AAAA	C
ATOH	3908	CB	ASN	408	40.939	66.240	46.388	1.00	74.46	AAAA	C
ATOH	3909	CG	ASN	408	41.986	67.242	45.947	1.00	82.51	AAAA	C
ATOH	3910	OD1	ASN	408	41.913	68.429	46.240	1.00	90.33	AAAA	O
ATOH	3911	HD2	ASN	408	43.028	66.821	45.253	1.00	84.46	AAAA	H
ATOH	3914	C	ASN	408	41.257	64.468	44.654	1.00	65.97	AAAA	C
ATOH	3915	O	ASN	408	41.251	63.374	45.151	1.00	63.82	AAAA	C
ATOH	3916	H	LEU	409	42.011	64.793	43.650	1.00	61.41	AAAA	H
ATOH	3918	CA	LEU	409	42.896	63.872	42.947	1.00	60.90	AAAA	C
ATOH	3919	CB	LEU	409	42.153	63.250	41.768	1.00	62.98	AAAA	C
ATOH	3920	CG	LEU	409	42.902	62.553	40.704	1.00	59.77	AAAA	C
ATOH	3921	CD1	LEU	409	43.488	61.205	41.197	1.00	54.06	AAAA	C
ATOH	3922	CD2	LEU	409	42.094	62.445	39.486	1.00	55.74	AAAA	C
ATOH	3923	C	LEU	409	44.151	64.599	42.485	1.00	61.19	AAAA	C
ATOH	3924	O	LEU	409	44.141	65.809	42.370	1.00	60.64	AAAA	O
ATOH	3925	H	THR	410	45.281	63.903	42.424	1.00	63.74	AAAA	H
ATOH	3927	CA	THR	410	46.588	64.462	42.131	1.00	60.44	AAAA	C
ATOH	3928	CB	THR	410	47.454	64.676	43.385	1.00	67.08	AAAA	C
ATOH	3929	OG1	THR	410	46.879	65.746	44.157	1.00	74.29	AAAA	O
ATOH	3931	OG2	THR	410	48.900	65.103	43.162	1.00	48.56	AAAA	C
ATOH	3932	C	THR	410	47.426	63.565	41.218	1.00	56.62	AAAA	C
ATOH	3933	O	THR	410	47.382	62.354	41.317	1.00	54.99	AAAA	O
ATOH	3934	H	ILE	411	48.977	64.245	40.288	1.00	53.97	AAAA	H
ATOH	3936	CA	ILE	411	48.897	63.562	39.291	1.00	53.29	AAAA	C

09555275-000001

## 39/58

ATOH	3937	CB	ILE	411	48.409	63.054	37.064	1.00	49.91	AAAA	C
ATOH	3938	CG	ILE	411	49.216	63.129	36.806	1.00	30.86	AAAA	C
ATOH	3939	CG	ILE	411	46.911	63.489	37.729	1.00	40.93	AAAA	C
ATOH	3940	CD	ILE	411	46.322	63.547	36.339	1.00	38.51	AAAA	C
ATOH	3941	C	ILE	411	50.319	64.018	39.569	1.00	55.38	AAAA	C
ATOH	3942	O	ILE	411	50.656	65.179	39.291	1.00	57.59	AAAA	O
ATOH	3943	H	SER	412	51.073	63.182	40.270	1.00	54.26	AAAA	H
ATOH	3945	CA	SER	412	52.434	63.502	40.689	1.00	54.46	AAAA	C
ATOH	3946	CB	SER	412	53.071	62.210	41.248	1.00	55.78	AAAA	C
ATOH	3947	CG	SER	412	53.756	62.536	42.434	1.00	67.12	AAAA	O
ATOH	3949	C	SER	412	53.326	63.910	39.523	1.00	55.52	AAAA	C
ATOH	3950	O	SER	412	54.081	64.876	39.527	1.00	55.04	AAAA	O
ATOH	3951	H	ALA	413	53.254	63.124	38.438	1.00	50.12	AAAA	H
ATOH	3953	CA	ALA	413	54.064	63.402	37.281	1.00	50.01	AAAA	C
ATOH	3954	CB	ALA	413	55.334	62.520	37.365	1.00	34.96	AAAA	C
ATOH	3955	C	ALA	413	53.301	63.078	35.994	1.00	49.71	AAAA	C
ATOH	3956	O	ALA	413	52.495	62.168	35.999	1.00	48.81	AAAA	O
ATOH	3957	H	GLY	414	53.675	63.690	34.895	1.00	47.92	AAAA	H
ATOH	3959	CA	GLY	414	53.057	63.454	33.607	1.00	51.73	AAAA	C
ATOH	3960	C	GLY	414	52.017	64.524	33.294	1.00	52.77	AAAA	C
ATOH	3961	O	GLY	414	51.684	65.370	34.114	1.00	53.23	AAAA	O
ATOH	3962	H	LYS	415	51.385	64.406	32.138	1.00	56.31	AAAA	H
ATOH	3964	CA	LYS	415	50.289	65.317	31.759	1.00	52.49	AAAA	C
ATOH	3965	CB	LYS	415	50.884	66.358	30.833	1.00	50.94	AAAA	C
ATOH	3966	CG	LYS	415	51.199	65.855	29.429	1.00	54.39	AAAA	C
ATOH	3967	CD	LYS	415	52.288	66.691	28.765	1.00	53.96	AAAA	C
ATOH	3968	CE	LYS	415	52.785	66.151	27.441	1.00	56.01	AAAA	C
ATOH	3969	CG	LYS	415	52.426	67.032	26.284	1.00	66.36	AAAA	H
ATOH	3973	C	LYS	415	49.110	64.576	31.155	1.00	50.04	AAAA	C
ATOH	3974	O	LYS	415	49.077	63.337	31.036	1.00	49.77	AAAA	O
ATOH	3975	H	MET	416	48.091	65.353	30.771	1.00	48.34	AAAA	H
ATOH	3977	CA	MET	416	46.890	64.734	30.186	1.00	46.77	AAAA	C
ATOH	3978	CB	MET	416	45.629	65.186	30.949	1.00	42.79	AAAA	C
ATOH	3979	CG	MET	416	45.836	65.880	32.273	1.00	40.91	AAAA	C
ATOH	3980	SD	MET	416	44.511	65.636	33.517	1.00	56.20	AAAA	S
ATOH	3981	CE	MET	416	44.002	67.366	33.690	1.00	35.94	AAAA	C
ATOH	3982	C	MET	416	46.623	65.064	28.729	1.00	40.40	AAAA	C
ATOH	3983	O	MET	416	46.963	66.137	28.247	1.00	34.84	AAAA	O
ATOH	3984	H	TYR	417	45.893	64.169	28.104	1.00	38.49	AAAA	H
ATOH	3986	CA	TYR	417	45.355	64.387	26.765	1.00	39.50	AAAA	C
ATOH	3987	CB	TYR	417	46.156	63.471	25.831	1.00	32.02	AAAA	C
ATOH	3988	CG	TYR	417	45.583	63.430	24.428	1.00	39.48	AAAA	C
ATOH	3989	CD	TYR	417	45.730	64.501	23.511	1.00	39.29	AAAA	C
ATOH	3990	CE	TYR	417	45.196	64.429	22.253	1.00	34.56	AAAA	C
ATOH	3991	CD	TYR	417	44.884	62.321	24.005	1.00	36.81	AAAA	C
ATOH	3992	CE	TYR	417	44.379	62.241	22.722	1.00	38.80	AAAA	C
ATOH	3993	CD	TYR	417	44.535	63.292	21.872	1.00	44.20	AAAA	C
ATOH	3994	OH	TYR	417	44.053	63.361	20.552	1.00	58.10	AAAA	O
ATOH	3996	C	TYR	417	43.853	64.065	26.698	1.00	44.18	AAAA	C
ATOH	3997	O	TYR	417	43.376	62.974	27.135	1.00	42.19	AAAA	O
ATOH	3998	H	PHE	418	43.068	64.971	26.106	1.00	45.84	AAAA	H
ATOH	4000	CA	PHE	418	41.644	64.761	25.910	1.00	45.67	AAAA	C
ATOH	4001	CB	PHE	418	40.772	65.657	26.720	1.00	47.19	AAAA	C
ATOH	4002	CG	PHE	418	40.675	65.264	28.177	1.00	43.44	AAAA	C
ATOH	4003	CD	PHE	418	41.552	65.685	29.132	1.00	38.43	AAAA	C
ATOH	4004	CD	PHE	418	39.638	64.417	28.544	1.00	51.21	AAAA	C
ATOH	4005	CE	PHE	418	41.402	65.291	30.440	1.00	46.44	AAAA	C
ATOH	4006	CE	PHE	418	39.486	64.023	29.845	1.00	46.63	AAAA	C
ATOH	4007	CG	PHE	418	40.358	64.454	30.801	1.00	44.68	AAAA	C
ATOH	4008	C	PHE	418	41.251	64.730	24.440	1.00	44.64	AAAA	C
ATOH	4009	O	PHE	418	41.375	65.762	23.812	1.00	47.60	AAAA	O
ATOH	4010	H	ALA	419	40.554	63.713	23.936	1.00	43.06	AAAA	H
ATOH	4012	CA	ALA	419	40.015	63.793	22.607	1.00	39.21	AAAA	C
ATOH	4013	CB	ALA	419	41.090	63.562	21.555	1.00	30.88	AAAA	C
ATOH	4014	C	ALA	419	38.837	62.846	22.366	1.00	41.77	AAAA	C
ATOH	4015	O	ALA	419	38.871	61.628	22.557	1.00	36.08	AAAA	O
ATOH	4016	H	PHE	420	37.829	63.398	21.618	1.00	40.41	AAAA	H
ATOH	4018	CA	PHE	420	36.742	62.621	21.070	1.00	40.03	AAAA	C
ATOH	4019	CB	PHE	420	37.157	61.430	20.180	1.00	45.51	AAAA	C
ATOH	4020	CG	PHE	420	37.832	61.909	18.912	1.00	54.18	AAAA	C
ATOH	4021	CD	PHE	420	39.221	61.987	18.751	1.00	49.23	AAAA	C
ATOH	4022	CD	PHE	420	37.006	62.345	17.871	1.00	47.65	AAAA	C
ATOH	4023	CE	PHE	420	39.783	62.496	17.567	1.00	46.00	AAAA	C
ATOH	4024	CE	PHE	420	37.572	62.833	16.725	1.00	51.10	AAAA	C
ATOH	4025	CZ	PHE	420	38.964	62.928	16.549	1.00	44.01	AAAA	C
ATOH	4026	C	PHE	420	35.762	62.146	22.126	1.00	41.65	AAAA	C
ATOH	4027	O	PHE	420	35.352	60.991	22.215	1.00	38.35	AAAA	O
ATOH	4028	H	ASH	421	35.459	63.024	23.049	1.00	45.35	AAAA	H
ATOH	4030	CA	ASH	421	34.477	62.960	24.112	1.00	46.86	AAAA	C
ATOH	4031	CB	ASH	421	35.183	63.276	25.449	1.00	43.60	AAAA	C
ATOH	4032	CG	ASH	421	36.407	62.401	25.654	1.00	47.90	AAAA	C
ATOH	4033	OD	ASH	421	36.426	61.147	25.714	1.00	44.83	AAAA	O
ATOH	4034	HD	ASH	421	37.541	63.101	25.732	1.00	37.46	AAAA	H
ATOH	4037	C	ASH	421	33.432	64.069	23.835	1.00	47.83	AAAA	C
ATOH	4038	O	ASH	421	33.617	65.233	24.237	1.00	38.95	AAAA	O

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**WO 99/28347**

**PCT/AU98/00998**

40/58

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ATOM	4039	H	PRO	422	32.453	63.777	22.268	1.00	47.86	AAAA	H
ATOM	4040	CO	PRO	422	32.213	62.423	22.372	1.00	44.11	AAAA	C
ATOM	4041	CA	PRO	422	31.463	64.776	22.605	1.00	47.85	AAAA	C
ATOM	4042	CB	PRO	422	30.731	64.084	21.446	1.00	44.86	AAAA	C
ATOM	4043	CG	PRO	422	30.947	62.623	21.606	1.00	43.01	AAAA	C
ATOM	4044	C	PRO	422	30.577	65.284	23.735	1.00	51.16	AAAA	C
ATOM	4045	O	PRO	422	30.223	66.486	23.744	1.00	48.54	AAAA	O
ATOM	4046	H	LYS	423	30.320	64.487	24.774	1.00	52.90	AAAA	H
ATOM	4048	CA	LYS	423	29.431	64.908	25.865	1.00	58.82	AAAA	C
ATOM	4049	CB	LYS	423	28.556	63.721	26.360	1.00	52.93	AAAA	C
ATOM	4050	CG	LYS	423	28.209	62.810	25.196	1.00	70.55	AAAA	C
ATOM	4051	CD	LYS	423	26.743	62.448	24.996	1.00	73.79	AAAA	C
ATOM	4052	CE	LYS	423	26.030	63.374	24.021	1.00	77.06	AAAA	C
ATOM	4053	NE	LYS	423	25.949	64.748	24.614	1.00	64.99	AAAA	H
ATOM	4057	O	LYS	423	30.158	65.482	27.071	1.00	57.43	AAAA	C
ATOM	4058	O	LYS	423	29.582	65.478	28.152	1.00	55.22	AAAA	O
ATOM	4059	H	LEU	424	31.425	65.859	26.862	1.00	55.95	AAAA	H
ATOM	4061	CA	LEU	424	32.261	66.162	28.017	1.00	57.07	AAAA	C
ATOM	4062	CB	LEU	424	33.463	65.250	28.237	1.00	49.16	AAAA	C
ATOM	4063	CG	LEU	424	34.390	65.748	29.370	1.00	68.27	AAAA	C
ATOM	4064	CD1	LEU	424	33.821	65.362	30.734	1.00	60.66	AAAA	C
ATOM	4065	CD2	LEU	424	35.825	65.276	29.123	1.00	60.35	AAAA	C
ATOM	4066	C	LEU	424	32.709	67.585	27.878	1.00	56.29	AAAA	C
ATOM	4067	O	LEU	424	33.696	67.861	27.201	1.00	59.98	AAAA	O
ATOM	4068	H	CYS	425	31.995	68.488	28.492	1.00	58.76	AAAA	H
ATOM	4070	CA	CYS	425	32.342	69.916	28.406	1.00	60.39	AAAA	C
ATOM	4071	C	CYS	425	33.771	70.119	28.810	1.00	62.59	AAAA	C
ATOM	4072	O	CYS	425	34.288	69.665	29.831	1.00	64.45	AAAA	O
ATOM	4073	SE	CYS	425	31.249	70.644	29.214	1.00	68.23	AAAA	C
ATOM	4074	SG	CYS	425	29.916	71.303	28.086	1.00	81.03	AAAA	S
ATOM	4075	H	VAL	426	34.529	70.953	28.102	1.00	65.31	AAAA	H
ATOM	4077	CA	VAL	426	35.943	71.149	29.358	1.00	65.49	AAAA	C
ATOM	4078	CB	VAL	426	36.644	72.022	27.310	1.00	66.66	AAAA	C
ATOM	4079	CG1	VAL	426	36.715	71.413	25.925	1.00	62.49	AAAA	C
ATOM	4080	CG2	VAL	426	35.962	73.365	27.239	1.00	60.92	AAAA	C
ATOM	4081	C	VAL	426	36.105	71.711	29.757	1.00	65.99	AAAA	C
ATOM	4082	O	VAL	426	37.180	71.724	30.388	1.00	64.51	AAAA	O
ATOM	4083	H	SER	427	35.090	72.361	30.267	1.00	67.67	AAAA	H
ATOM	4085	CA	SER	427	35.091	72.927	31.599	1.00	66.85	AAAA	C
ATOM	4086	CB	SER	427	33.685	73.499	31.8				



## 41/58

ATOH	4144	CB	HET	432	40.237	67.522	35.714	1.00	54.25	AAAA	C
ATOH	4145	CG	HET	432	41.254	66.426	35.971	1.00	40.18	AAAA	C
ATOH	4146	SD	HET	432	40.829	64.925	35.112	1.00	52.21	AAAA	S
ATOH	4147	CE	HET	432	41.592	63.681	36.137	1.00	54.99	AAAA	C
ATOH	4148	C	HET	432	41.991	69.170	36.626	1.00	64.65	AAAA	C
ATOH	4149	O	HET	432	42.530	68.992	37.653	1.00	65.89	AAAA	O
ATOH	4150	H	GLU	433	42.331	69.811	35.556	1.00	65.78	AAAA	H
ATOH	4152	CA	GLU	433	43.622	70.469	35.510	1.00	69.16	AAAA	C
ATOH	4153	CB	GLU	433	43.704	71.506	31.401	1.00	69.58	AAAA	C
ATOH	4154	CG	GLU	433	44.121	70.967	33.048	1.00	76.31	AAAA	C
ATOH	4155	CD	GLU	433	44.623	72.149	32.242	1.00	82.02	AAAA	C
ATOH	4156	OE1	GLU	433	44.718	73.224	32.874	1.00	86.82	AAAA	O
ATOH	4157	OE2	GLU	433	44.905	72.050	31.042	1.00	88.26	AAAA	O
ATOH	4158	C	GLU	433	44.916	71.219	36.701	1.00	71.29	AAAA	C
ATOH	4159	O	GLU	433	45.133	71.083	37.294	1.00	74.29	AAAA	O
ATOH	4160	H	GLU	434	43.178	72.120	37.280	1.00	72.93	AAAA	H
ATOH	4162	CA	GLU	434	43.505	72.873	38.485	1.00	72.86	AAAA	C
ATOH	4163	CB	GLU	434	42.458	73.916	38.840	1.00	81.36	AAAA	C
ATOH	4164	CG	GLU	434	41.191	73.956	38.032	1.00	83.34	AAAA	C
ATOH	4165	CD	GLU	434	40.191	75.001	38.432	1.00	87.32	AAAA	C
ATOH	4166	OE1	GLU	434	39.521	74.929	39.505	1.00	97.34	AAAA	O
ATOH	4167	OE2	GLU	434	40.080	75.941	37.583	1.00	99.95	AAAA	O
ATOH	4168	C	GLU	434	43.675	71.886	39.632	1.00	71.46	AAAA	C
ATOH	4169	O	GLU	434	44.728	71.858	40.251	1.00	78.49	AAAA	O
ATOH	4170	N	VAL	435	42.670	71.095	39.926	1.00	66.34	AAAA	H
ATOH	4172	CA	VAL	435	42.711	70.129	41.001	1.00	62.49	AAAA	C
ATOH	4173	CB	VAL	435	41.451	69.217	40.972	1.00	60.38	AAAA	C
ATOH	4174	CG1	VAL	435	41.547	68.214	42.194	1.00	52.32	AAAA	C
ATOH	4175	CG2	VAL	435	40.203	70.073	41.029	1.00	50.79	AAAA	C
ATOH	4176	C	VAL	435	43.939	69.253	41.018	1.00	60.74	AAAA	C
ATOH	4177	O	VAL	435	44.607	69.165	42.034	1.00	62.37	AAAA	O
ATOH	4178	H	THR	436	44.282	68.506	39.988	1.00	60.67	AAAA	H
ATOH	4180	CA	THR	436	45.335	67.516	39.936	1.00	56.36	AAAA	C
ATOH	4181	CB	THR	436	45.199	66.565	38.736	1.00	50.92	AAAA	C
ATOH	4182	CG1	THR	436	44.913	67.283	37.503	1.00	47.03	AAAA	O
ATOH	4184	CG2	THR	436	44.108	65.526	38.901	1.00	54.38	AAAA	C
ATOH	4185	C	THR	436	46.701	68.184	39.930	1.00	60.55	AAAA	C
ATOH	4186	O	THR	436	47.714	67.490	40.024	1.00	60.61	AAAA	O
ATOH	4187	H	GLY	437	46.836	69.496	39.835	1.00	60.65	AAAA	H
ATOH	4189	CA	GLY	437	48.102	70.164	39.749	1.00	59.47	AAAA	C
ATOH	4190	C	GLY	437	48.800	69.864	38.424	1.00	64.78	AAAA	C
ATOH	4191	O	GLY	437	49.983	70.254	38.245	1.00	62.70	AAAA	O
ATOH	4192	H	THR	438	48.112	69.387	37.380	1.00	63.79	AAAA	H
ATOH	4194	CA	THR	438	48.731	69.169	36.076	1.00	65.09	AAAA	C
ATOH	4195	CB	THR	438	47.967	68.027	35.411	1.00	66.87	AAAA	C
ATOH	4196	CG1	THR	438	46.600	68.385	35.731	1.00	62.22	AAAA	O
ATOH	4198	CG2	THR	438	48.208	66.659	36.019	1.00	68.74	AAAA	C
ATOH	4199	C	THR	438	48.590	70.415	35.220	1.00	66.14	AAAA	C
ATOH	4200	O	THR	439	49.003	70.543	34.070	1.00	68.05	AAAA	O
ATOH	4201	H	LYS	439	48.089	71.481	35.822	1.00	67.37	AAAA	H
ATOH	4203	CA	LYS	439	47.927	72.757	35.154	1.00	71.08	AAAA	C
ATOH	4204	CB	LYS	439	47.114	73.708	36.034	1.00	69.23	AAAA	C
ATOH	4205	CG	LYS	439	46.677	74.938	35.265	1.00	77.26	AAAA	C
ATOH	4206	CD	LYS	439	45.832	75.942	36.014	1.00	81.65	AAAA	C
ATOH	4207	CE	LYS	439	44.385	75.475	36.182	1.00	87.39	AAAA	C
ATOH	4208	HE	LYS	439	43.667	76.431	37.100	1.00	93.85	AAAA	H
ATOH	4212	C	LYS	439	49.249	73.396	34.752	1.00	73.01	AAAA	C
ATOH	4213	O	LYS	439	49.996	73.986	35.541	1.00	74.80	AAAA	O
ATOH	4214	H	GLY	440	49.517	73.453	33.441	1.00	73.33	AAAA	H
ATOH	4216	CA	GLY	440	50.733	74.167	33.014	1.00	71.39	AAAA	C
ATOH	4217	C	GLY	440	51.716	73.304	32.389	1.00	71.20	AAAA	C
ATOH	4218	O	GLY	440	52.684	73.650	31.822	1.00	72.70	AAAA	O
ATOH	4219	H	ARG	441	51.445	71.908	32.436	1.00	72.99	AAAA	H
ATOH	4221	CA	ARG	441	52.343	70.945	31.831	1.00	74.12	AAAA	C
ATOH	4222	CB	ARG	441	52.517	69.740	32.716	1.00	69.44	AAAA	C
ATOH	4223	CG	ARG	441	51.847	69.695	34.003	1.00	63.34	AAAA	C
ATOH	4224	CD	ARG	441	52.060	68.314	34.595	1.00	67.64	AAAA	C
ATOH	4225	HE	ARG	441	52.244	68.395	36.030	1.00	61.00	AAAA	H
ATOH	4227	CE	ARG	441	52.326	67.357	36.831	1.00	59.21	AAAA	C
ATOH	4228	HH1	ARG	441	52.258	66.117	36.395	1.00	60.57	AAAA	H
ATOH	4231	HH2	ARG	441	52.468	67.596	38.128	1.00	72.94	AAAA	H
ATOH	4234	C	ARG	441	51.760	70.446	30.511	1.00	73.50	AAAA	C
ATOH	4235	O	ARG	441	52.195	69.424	30.012	1.00	74.73	AAAA	O
ATOH	4236	H	GLI	442	50.732	71.114	30.043	1.00	74.60	AAAA	H
ATOH	4238	CA	GLI	442	49.959	70.646	29.914	1.00	75.13	AAAA	C
ATOH	4239	CB	GLI	442	48.457	70.875	29.126	1.00	68.73	AAAA	C
ATOH	4240	CG	GLI	442	47.669	69.576	29.195	1.00	71.20	AAAA	C
ATOH	4241	CD	GLI	442	47.623	69.028	30.607	1.00	70.98	AAAA	C
ATOH	4242	OE1	GLI	442	47.714	67.822	30.868	1.00	78.66	AAAA	O
ATOH	4243	HE2	GLI	442	47.477	69.907	31.584	1.00	66.86	AAAA	H
ATOH	4246	C	GLI	442	50.326	71.359	27.627	1.00	77.69	AAAA	C
ATOH	4247	O	GLI	442	50.227	72.569	27.530	1.00	75.57	AAAA	O
ATOH	4248	H	ALA	443	50.474	70.554	26.575	1.00	81.51	AAAA	H
ATOH	4250	CA	ALA	443	50.643	71.148	25.236	1.00	82.95	AAAA	C
ATOH	4251	CB	ALA	443	51.104	70.118	24.220	1.00	81.69	AAAA	C

TOOEBO-545550

42/58

ATOM	4252	C	ALA	443	49.259	71.706	24.952	1.00	83.73	AAAA	C
ATOM	4253	O	ALA	443	49.398	71.744	25.830	1.00	83.87	AAAA	C
ATOM	4254	H	LYS	444	48.914	72.052	23.713	1.00	86.20	AAAA	H
ATOM	4256	CA	LYS	444	47.559	72.524	23.482	1.00	85.88	AAAA	C
ATOM	4257	CB	LYS	444	47.426	73.997	23.128	1.00	83.99	AAAA	C
ATOM	4258	CG	LYS	444	46.673	74.734	24.241	1.00	93.60	AAAA	C
ATOM	4259	CD	LYS	444	45.883	73.841	25.186	1.00	95.14	AAAA	C
ATOM	4260	CE	LYS	444	46.390	73.786	26.614	1.00	97.04	AAAA	C
ATOM	4261	NE	LYS	444	45.368	73.090	27.473	1.00	97.22	AAAA	H
ATOM	4265	C	LYS	444	46.659	71.779	22.508	1.00	84.20	AAAA	C
ATOM	4266	O	LYS	444	45.428	71.901	22.635	1.00	85.63	AAAA	C
ATOM	4267	H	GLY	445	47.214	70.734	21.916	1.00	78.85	AAAA	H
ATOM	4269	CA	GLY	445	46.368	69.786	21.208	1.00	75.06	AAAA	C
ATOM	4270	C	GLY	445	45.803	68.844	22.260	1.00	72.30	AAAA	C
ATOM	4271	O	GLY	445	44.963	67.993	21.940	1.00	74.90	AAAA	C
ATOM	4272	H	ASP	446	46.300	68.981	23.492	1.00	67.97	AAAA	H
ATOM	4274	CA	ASP	446	45.914	68.174	24.642	1.00	62.81	AAAA	C
ATOM	4275	CB	ASP	446	46.754	68.552	25.873	1.00	55.24	AAAA	C
ATOM	4276	CG	ASP	446	48.213	68.169	25.801	1.00	54.07	AAAA	C
ATOM	4277	OD1	ASP	446	48.693	67.385	24.946	1.00	45.08	AAAA	C
ATOM	4278	OD2	ASP	446	49.091	68.595	26.593	1.00	50.12	AAAA	C
ATOM	4279	C	ASP	446	44.438	68.274	25.016	1.00	58.07	AAAA	C
ATOM	4280	O	ASP	446	43.610	67.369	25.127	1.00	55.59	AAAA	C
ATOM	4281	H	ILE	447	44.043	69.527	25.226	1.00	54.13	AAAA	H
ATOM	4283	CA	ILE	447	42.652	69.822	25.510	1.00	54.09	AAAA	C
ATOM	4284	CB	ILE	447	42.505	70.502	26.877	1.00	48.92	AAAA	C
ATOM	4285	CG2	ILE	447	41.030	70.663	27.182	1.00	41.02	AAAA	C
ATOM	4286	CG1	ILE	447	43.211	69.621	27.932	1.00	52.36	AAAA	C
ATOM	4287	CD1	ILE	447	43.468	70.323	29.237	1.00	48.47	AAAA	C
ATOM	4288	C	ILE	447	42.027	70.591	24.364	1.00	53.06	AAAA	C
ATOM	4289	O	ILE	447	41.718	71.772	24.423	1.00	56.08	AAAA	C
ATOM	4290	H	ASH	448	41.625	69.915	23.307	1.00	53.17	AAAA	H
ATOM	4292	CA	ASH	448	41.013	70.642	22.202	1.00	54.61	AAAA	C
ATOM	4293	CB	ASH	448	41.283	69.982	20.863	1.00	49.17	AAAA	C
ATOM	4294	CG	ASH	448	40.415	68.786	20.577	1.00	49.40	AAAA	C
ATOM	4295	OD1	ASH	448	39.287	68.977	20.113	1.00	52.34	AAAA	C
ATOM	4296	HD2	ASH	448	40.990	67.622	20.871	1.00	52.49	AAAA	H
ATOM	4299	C	ASH	448	39.518	70.824	22.402	1.00	56.44	AAAA	C
ATOM	4300	O	ASH	448	38.816	69.974	22.939	1.00	55.83	AAAA	C
ATOM	4301	H	THR	449	39.071	71.917	21.764	1.00	58.52	AAAA	H
ATOM	4303	CA	THR	449	37.682	72.351	21.901	1.00	58.62	AAAA	C
ATOM	4304	CB	THR	449	37.497	73.845	22.169	1.00	55.90	AAAA	C
ATOM	4305	CG1	THR	449	37.913	74.485	20.943	1.00	68.89	AAAA	C
ATOM	4307	CG2	THR	449	39.354	74.352	23.310	1.00	59.06	AAAA	C
ATOM	4308	C	THR	449	36.920	72.053	20.628	1.00	56.82	AAAA	C
ATOM	4309	O	THR	449	35.750	72.381	20.473	1.00	60.87	AAAA	C
ATOM	4310	H	ARG	450	37.539	71.304	19.757	1.00	55.76	AAAA	H
ATOM	4312	CA	ARG	450	36.887	70.935	18.507	1.00	54.66	AAAA	C
ATOM	4313	CB	ARG	450	37.845	71.179	17.377	1.00	48.33	AAAA	C
ATOM	4314	CG	ARG	450	38.385	69.975	16.645	1.00	54.81	AAAA	C
ATOM	4315	CD	ARG	450	39.487	70.561	15.696	1.00	44.92	AAAA	C
ATOM	4316	NE	ARG	450	40.706	70.719	16.488	1.00	52.49	AAAA	H
ATOM	4318	CE	ARG	450	41.544	69.757	16.882	1.00	39.08	AAAA	C
ATOM	4319	HH1	ARG	450	41.176	68.572	16.466	1.00	41.07	AAAA	H
ATOM	4322	HH2	ARG	450	42.601	70.091	17.610	1.00	45.18	AAAA	H
ATOM	4325	C	ARG	450	36.267	69.553	18.557	1.00	56.82	AAAA	C
ATOM	4326	O	ARG	450	35.186	69.303	17.992	1.00	58.15	AAAA	C
ATOM	4327	H	ASH	451	36.800	68.583	19.324	1.00	56.66	AAAA	H
ATOM	4329	CA	ASH	451	36.107	67.311	19.434	1.00	50.27	AAAA	C
ATOM	4330	CB	ASH	451	36.725	66.127	18.760	1.00	48.54	AAAA	C
ATOM	4331	CG	ASH	451	38.243	66.143	18.764	1.00	60.51	AAAA	C
ATOM	4332	OD1	ASH	451	38.779	66.279	19.855	1.00	53.45	AAAA	C
ATOM	4333	HD2	ASH	451	38.707	65.975	17.506	1.00	54.88	AAAA	H
ATOM	4336	C	ASH	451	35.849	66.854	20.869	1.00	52.97	AAAA	C
ATOM	4337	O	ASH	451	35.330	65.750	21.036	1.00	49.71	AAAA	C
ATOM	4338	H	ASH	452	36.126	67.668	21.951	1.00	51.98	AAAA	H
ATOM	4340	CA	ASH	452	35.769	67.485	23.229	1.00	55.98	AAAA	C
ATOM	4341	CB	ASH	452	36.947	67.873	24.136	1.00	54.62	AAAA	C
ATOM	4342	CG	ASH	452	37.936	66.736	24.285	1.00	60.96	AAAA	C
ATOM	4343	OD1	ASH	452	37.646	65.633	24.735	1.00	51.30	AAAA	C
ATOM	4344	HD2	ASH	452	39.153	67.098	23.855	1.00	56.75	AAAA	H
ATOM	4347	C	ASH	452	34.603	68.385	23.688	1.00	58.11	AAAA	C
ATOM	4348	O	ASH	452	34.785	69.629	23.657	1.00	55.97	AAAA	C
ATOM	4349	H	GLY	453	33.444	67.813	23.985	1.00	55.08	AAAA	H
ATOM	4351	CA	GLY	453	32.313	68.658	24.295	1.00	59.47	AAAA	C
ATOM	4352	C	GLY	453	31.500	69.269	23.174	1.00	64.95	AAAA	C
ATOM	4353	O	GLY	453	30.302	69.603	23.276	1.00	65.71	AAAA	C
ATOM	4354	H	GLU	454	31.910	69.109	21.910	1.00	67.44	AAAA	H
ATOM	4356	CA	GLU	454	31.266	69.543	20.690	1.00	63.63	AAAA	C
ATOM	4357	CB	GLU	454	31.739	68.818	19.401	1.00	53.71	AAAA	C
ATOM	4358	CG	GLU	454	32.349	67.430	19.739	1.00	49.50	AAAA	C
ATOM	4359	CD	GLU	454	32.368	66.620	19.454	1.00	54.61	AAAA	C
ATOM	4360	OE1	GLU	454	31.368	66.637	17.702	0.01	54.10	AAAA	C
ATOM	4361	OE2	GLU	454	33.417	66.003	18.120	0.01	54.17	AAAA	C
ATOM	4362	C	GLU	454	29.762	69.301	26.767	1.00	65.41	AAAA	C

T O O L S - C E N T R E

43/58

ATOH	4363	O	GLU	454	29.922	70.089	20.169	1.00	67.86	AAAA	O
ATOH	4364	H	ARG	455	29.298	69.187	21.333	1.00	66.45	AAAA	H
ATOH	4366	CA	ARG	455	27.843	67.997	21.371	1.00	69.33	AAAA	C
ATOH	4367	CB	ARG	455	27.448	66.733	20.652	1.00	73.38	AAAA	C
ATOH	4368	CG	ARG	455	28.467	65.912	19.924	1.00	74.27	AAAA	C
ATOH	4369	CD	ARG	455	27.775	64.740	19.240	1.00	79.54	AAAA	C
ATOH	4370	HE	ARG	455	27.301	63.638	20.052	1.00	86.31	AAAA	H
ATOH	4372	CE	ARG	455	27.802	62.412	20.189	1.00	88.60	AAAA	C
ATOH	4373	HH1	ARG	455	28.990	61.997	19.538	1.00	84.51	AAAA	H
ATOH	4376	HH2	ARG	455	27.225	61.523	21.003	1.00	87.36	AAAA	H
ATOH	4379	C	ARG	455	27.213	67.934	22.756	1.00	67.35	AAAA	C
ATOH	4380	O	ARG	455	26.423	67.025	22.961	1.00	66.26	AAAA	O
ATOH	4381	H	ALA	456	27.499	68.879	23.623	1.00	66.50	AAAA	H
ATOH	4383	CA	ALA	456	26.947	68.906	24.964	1.00	72.01	AAAA	C
ATOH	4384	CB	ALA	456	27.832	68.147	25.939	1.00	61.84	AAAA	C
ATOH	4385	C	ALA	456	26.802	70.379	25.371	1.00	75.25	AAAA	C
ATOH	4386	O	ALA	456	27.706	71.219	25.202	1.00	81.30	AAAA	O
ATOH	4387	H	SER	457	25.653	70.720	25.939	0.50	71.91	AAAA	H
ATOH	4389	CA	SER	457	25.431	72.095	26.358	0.50	69.64	AAAA	C
ATOH	4390	CB	SER	457	23.991	72.247	26.936	0.50	73.30	AAAA	C
ATOH	4391	CG	SER	457	23.422	73.294	26.060	0.50	73.31	AAAA	O
ATOH	4393	C	SER	457	26.418	72.510	27.437	0.50	69.27	AAAA	C
ATOH	4394	O	SER	457	26.458	71.957	28.530	0.50	67.32	AAAA	O
ATOH	4395	H	CYS	458	27.197	73.531	27.117	0.50	70.44	AAAA	H
ATOH	4397	CA	CYS	458	28.287	73.960	27.972	0.50	72.57	AAAA	C
ATOH	4398	C	CYS	458	27.949	75.205	28.757	0.50	72.54	AAAA	C
ATOH	4399	O	CYS	458	27.065	75.128	29.606	0.50	76.63	AAAA	O
ATOH	4400	CB	CYS	458	29.527	74.171	27.089	0.50	75.38	AAAA	C
ATOH	4401	SG	CYS	458	30.844	73.032	27.490	0.50	72.18	AAAA	S
ATOH	4402	H	ALA	459	28.607	76.306	28.441	0.50	70.13	AAAA	H
ATOH	4404	CA	ALA	459	28.445	77.572	29.116	0.50	70.05	AAAA	C
ATOH	4405	CB	ALA	459	27.046	78.149	28.996	0.50	70.57	AAAA	C
ATOH	4406	C	ALA	459	28.826	77.461	30.601	0.50	70.13	AAAA	C
ATOH	4407	O	ALA	459	29.080	78.556	31.154	0.50	69.96	AAAA	O
ATOH	4407	OT	ALA	459	28.855	76.301	31.054	0.50	68.22	AAAA	O
ATOH	4522	C1	HAG	461	59.581	7.102	61.119	1.00	88.13	AAAA	C
ATOH	4524	C2	HAG	461	59.964	7.338	59.697	1.00	91.94	AAAA	C
ATOH	4526	H2	HAG	461	58.738	7.699	58.920	1.00	92.72	AAAA	H
ATOH	4528	C7	HAG	461	58.400	9.020	58.999	1.00	96.97	AAAA	C
ATOH	4529	C7	HAG	461	58.879	9.774	59.726	1.00	98.62	AAAA	O
ATOH	4530	C8	HAG	461	57.323	9.390	58.043	1.00	100.60	AAAA	C
ATOH	4534	C3	HAG	461	60.725	6.225	59.085	1.00	94.77	AAAA	C
ATOH	4536	C3	HAG	461	61.417	6.725	57.930	1.00	98.51	AAAA	O
ATOH	4538	C4	HAG	461	61.873	5.869	60.064	1.00	96.01	AAAA	C
ATOH	4540	O4	HAG	461	62.661	4.821	59.484	1.00	99.20	AAAA	O
ATOH	4542	C5	HAG	461	61.359	5.529	61.474	1.00	95.13	AAAA	C
ATOH	4545	C6	HAG	461	62.465	5.321	62.495	1.00	93.66	AAAA	C
ATOH	4548	O6	HAG	461	62.745	6.364	63.354	1.00	92.13	AAAA	O
ATOH	4544	O5	HAG	461	60.625	6.648	61.949	1.00	91.92	AAAA	O
ATOH	4550	C1	HAG	463	33.054	15.249	72.938	1.00	43.58	AAAA	C
ATOH	4552	C2	HAG	463	31.644	15.282	73.412	1.00	43.62	AAAA	C
ATOH	4554	H2	HAG	463	30.709	14.527	72.541	1.00	42.16	AAAA	H
ATOH	4556	C7	HAG	463	29.912	13.584	73.099	1.00	40.84	AAAA	C
ATOH	4557	C7	HAG	463	29.928	13.406	74.222	1.00	40.10	AAAA	O
ATOH	4558	C8	HAG	463	28.975	12.694	72.394	1.00	35.47	AAAA	C
ATOH	4562	C3	HAG	463	31.150	16.675	73.448	1.00	45.40	AAAA	C
ATOH	4564	O3	HAG	463	29.979	16.555	74.196	1.00	45.99	AAAA	O
ATOH	4566	C4	HAG	463	32.117	17.617	74.171	1.00	50.36	AAAA	C
ATOH	4568	O4	HAG	463	31.596	18.919	73.891	1.00	53.97	AAAA	O
ATOH	4569	C5	HAG	463	33.589	17.477	73.725	1.00	48.50	AAAA	C
ATOH	4572	C6	HAG	463	34.490	17.996	74.742	1.00	48.34	AAAA	C
ATOH	4575	O6	HAG	463	34.906	18.739	75.671	1.00	57.11	AAAA	O
ATOH	4571	O5	HAG	463	33.942	16.120	73.583	1.00	48.58	AAAA	O
ATOH	4576	C1	FUC	464	34.544	19.954	76.083	1.00	81.45	AAAA	C
ATOH	4578	C2	FUC	464	35.179	21.173	75.463	1.00	86.35	AAAA	C
ATOH	4579	O2	FUC	464	35.153	21.169	74.021	1.00	92.94	AAAA	O
ATOH	4582	C3	FUC	464	34.252	22.284	75.945	1.00	86.79	AAAA	C
ATOH	4584	O3	FUC	464	34.691	23.613	75.596	1.00	87.83	AAAA	O
ATOH	4586	C4	FUC	464	33.871	22.274	77.412	1.00	86.67	AAAA	C
ATOH	4588	O4	FUC	464	34.598	23.297	78.115	1.00	87.06	AAAA	O
ATOH	4590	C5	FUC	464	33.921	20.894	78.040	1.00	85.85	AAAA	C
ATOH	4593	C6	FUC	464	34.279	20.768	79.512	1.00	83.37	AAAA	C
ATOH	4592	O5	FUC	464	35.042	20.150	77.425	1.00	82.43	AAAA	O
ATOH	4597	C1	HAG	465	31.575	19.813	74.940	1.00	64.68	AAAA	C
ATOH	4599	C2	HAG	465	31.267	21.207	74.437	1.00	69.57	AAAA	C
ATOH	4601	H2	HAG	465	32.480	21.642	73.690	1.00	71.25	AAAA	H
ATOH	4603	C7	HAG	465	32.401	21.953	72.381	1.00	73.86	AAAA	C
ATOH	4604	O7	HAG	465	31.373	21.835	71.881	1.00	74.80	AAAA	O
ATOH	4605	C8	HAG	465	33.679	22.401	71.787	1.00	76.00	AAAA	C
ATOH	4609	C3	HAG	465	31.050	22.214	75.546	1.00	72.71	AAAA	C
ATOH	4611	O3	HAG	465	30.713	23.517	75.108	1.00	71.03	AAAA	O
ATOH	4613	C4	HAG	465	30.035	21.654	76.560	1.00	75.71	AAAA	C
ATOH	4615	O4	HAG	465	29.953	22.409	77.793	1.00	76.79	AAAA	O
ATOH	4617	C5	HAG	465	30.498	20.238	76.977	1.00	75.45	AAAA	C
ATOH	4620	C6	HAG	465	29.461	19.647	77.930	1.00	75.64	AAAA	C

09555275-0000

## 44/58

ATOH	4623	06	IAG	465	28.385	19.239	77.142	1.00	76.25	AAAA	O
ATOH	4619	05	IAG	465	30.514	12.425	75.807	1.00	71.44	AAAA	O
ATOH	4625	C1	IAG	467	49.927	11.058	87.926	1.00	96.51	AAAA	C
ATOH	4627	C2	IAG	467	50.538	11.751	89.100	1.00	99.92	AAAA	C
ATOH	4629	I12	IAG	467	49.662	12.898	89.459	1.00	101.79	AAAA	I
ATOH	4631	C7	IAG	467	49.299	13.021	90.759	1.00	103.63	AAAA	C
ATOH	4632	O7	IAG	467	49.541	12.267	91.586	1.00	105.48	AAAA	O
ATOH	4633	C9	IAG	467	48.526	14.239	91.102	1.00	105.02	AAAA	C
ATOH	4637	C3	IAG	467	51.967	12.134	98.802	1.00	101.03	AAAA	C
ATOH	4639	O3	IAG	467	52.535	12.761	89.949	1.00	100.89	AAAA	O
ATOH	4641	C4	IAG	467	52.643	10.771	88.506	1.00	101.15	AAAA	C
ATOH	4643	O4	IAG	467	54.067	10.834	99.441	1.00	101.35	AAAA	O
ATOH	4645	C5	IAG	467	52.039	10.160	87.218	1.00	100.16	AAAA	C
ATOH	4648	C6	IAG	467	52.746	8.852	86.934	1.00	99.75	AAAA	C
ATOH	4651	O6	IAG	467	52.088	7.704	87.302	1.00	101.54	AAAA	O
ATOH	4647	O5	IAG	467	50.671	9.918	87.503	1.00	98.59	AAAA	O
ATOH	4653	C1	IAG	469	55.375	46.143	66.863	1.00	48.45	AAAA	C
ATOH	4655	C2	IAG	469	56.601	46.993	66.861	1.00	50.42	AAAA	C
ATOH	4657	I12	IAG	469	57.106	47.015	65.451	1.00	51.50	AAAA	I
ATOH	4659	C7	IAG	469	57.135	48.143	64.745	1.00	48.89	AAAA	C
ATOH	4660	O7	IAG	469	56.849	49.101	65.234	1.00	55.62	AAAA	O
ATOH	4661	C8	IAG	469	57.838	48.134	63.394	1.00	43.70	AAAA	C
ATOH	4665	C3	IAG	469	57.608	46.491	67.844	1.00	49.62	AAAA	C
ATOH	4667	O3	IAG	469	58.640	47.461	68.031	1.00	47.76	AAAA	O
ATOH	4669	C4	IAG	469	56.843	46.265	69.172	1.00	48.47	AAAA	C
ATOH	4671	O4	IAG	469	57.826	45.800	70.134	1.00	50.06	AAAA	O
ATOH	4672	C5	IAG	469	55.847	45.130	68.950	1.00	50.81	AAAA	C
ATOH	4675	C6	IAG	469	55.190	44.720	70.239	1.00	53.92	AAAA	C
ATOH	4678	O6	IAG	469	54.829	45.551	71.192	1.00	56.25	AAAA	O
ATOH	4674	O5	IAG	469	54.914	45.599	68.043	1.00	55.45	AAAA	O
ATOH	4679	C1	FUC	470	53.830	46.395	71.203	1.00	61.17	AAAA	C
ATOH	4681	C2	FUC	470	53.642	47.121	72.534	1.00	59.23	AAAA	C
ATOH	4682	O2	FUC	470	54.861	46.876	73.241	1.00	55.14	AAAA	O
ATOH	4685	C3	FUC	470	53.421	48.429	71.757	1.00	58.39	AAAA	C
ATOH	4687	O3	FUC	470	53.381	49.515	72.637	1.00	56.30	AAAA	O
ATOH	4689	C4	FUC	470	52.245	48.255	70.809	1.00	61.24	AAAA	C
ATOH	4691	O4	FUC	470	51.061	47.904	71.544	1.00	63.74	AAAA	O
ATOH	4693	C5	FUC	470	52.455	47.086	69.828	1.00	62.20	AAAA	C
ATOH	4696	C6	FUC	470	51.462	46.723	68.784	1.00	59.15	AAAA	C
ATOH	4695	O5	FUC	470	52.567	45.889	70.781	1.00	64.68	AAAA	O
ATOH	4700	C1	IAG	471	58.034	46.760	71.149	1.00	37.00	AAAA	C
ATOH	4702	C2	IAG	471	58.977	46.225	72.186	1.00	40.30	AAAA	C
ATOH	4704	I12	IAG	471	58.958	44.787	72.509	1.00	36.82	AAAA	I
ATOH	4706	C7	IAG	471	57.856	44.183	72.903	1.00	44.21	AAAA	C
ATOH	4707	O7	IAG	471	56.892	44.744	72.885	1.00	51.50	AAAA	O
ATOH	4708	C8	IAG	471	58.262	42.814	73.323	1.00	46.02	AAAA	C
ATOH	4712	C3	IAG	471	58.901	47.250	73.291	1.00	34.50	AAAA	C
ATOH	4714	O3	IAG	471	59.698	46.917	74.365	1.00	35.84	AAAA	O
ATOH	4716	C4	IAG	471	59.645	48.488	72.694	1.00	38.52	AAAA	C
ATOH	4718	O4	IAG	471	59.754	49.464	73.694	1.00	37.44	AAAA	O
ATOH	4719	C5	IAG	471	59.056	48.950	71.332	1.00	36.94	AAAA	C
ATOH	4722	C6	IAG	471	60.116	49.692	70.525	1.00	36.14	AAAA	C
ATOH	4725	O6	IAG	471	61.166	50.390	71.080	1.00	43.49	AAAA	O
ATOH	4721	O5	IAG	471	58.853	47.785	70.530	1.00	34.98	AAAA	O
ATOH	4727	C1	IAH	472	61.035	49.984	73.959	1.00	53.37	AAAA	C
ATOH	4729	C2	IAH	472	60.920	51.497	74.260	1.00	56.72	AAAA	C
ATOH	4730	O2	IAH	472	59.924	51.584	75.272	1.00	62.11	AAAA	O
ATOH	4733	C3	IAH	472	62.216	52.031	74.840	1.00	60.70	AAAA	C
ATOH	4735	O3	IAH	472	62.028	53.337	75.393	1.00	60.70	AAAA	O
ATOH	4736	C4	IAH	472	62.787	51.161	75.932	1.00	55.46	AAAA	C
ATOH	4738	O4	IAH	472	64.085	51.595	76.171	1.00	57.16	AAAA	O
ATOH	4740	C5	IAH	472	62.797	49.685	75.511	1.00	52.10	AAAA	C
ATOH	4743	C6	IAH	472	63.458	48.905	76.595	1.00	50.32	AAAA	C
ATOH	4746	O6	IAH	472	62.990	48.969	77.885	1.00	51.02	AAAA	O
ATOH	4742	C5	IAH	472	61.443	49.467	75.200	1.00	53.22	AAAA	O
ATOH	4748	C1	IAH	473	62.504	54.401	74.672	1.00	72.61	AAAA	C
ATOH	4750	C2	IAH	473	62.417	55.679	75.569	1.00	75.28	AAAA	C
ATOH	4751	O2	IAH	473	63.378	56.709	75.348	1.00	74.98	AAAA	O
ATOH	4754	C3	IAH	473	60.977	56.163	75.493	1.00	78.65	AAAA	C
ATOH	4756	O3	IAH	473	60.941	57.447	76.148	1.00	79.16	AAAA	O
ATOH	4758	C4	IAH	473	60.344	56.204	74.114	1.00	78.70	AAAA	C
ATOH	4760	O4	IAH	473	58.983	56.571	74.178	1.00	78.93	AAAA	O
ATOH	4762	C5	IAH	473	60.499	54.802	73.474	1.00	76.89	AAAA	C
ATOH	4765	C6	IAH	473	59.968	54.490	72.091	1.00	74.73	AAAA	C
ATOH	4768	O6	IAH	473	60.239	55.469	71.138	1.00	71.39	AAAA	O
ATOH	4764	O5	IAH	473	61.916	54.562	73.463	1.00	74.97	AAAA	O
ATOH	4408	CB	ALA	479	42.462	74.494	16.374	1.00	82.06	BBBB	C
ATOH	4409	C	ALA	479	40.017	74.702	17.901	1.00	91.42	BBBB	C
ATOH	4410	O	ALA	479	40.393	75.108	18.103	1.00	96.11	BBBB	O
ATOH	4413	I	ALA	479	40.696	74.461	14.624	1.00	86.42	BBBB	I
ATOH	4415	CA	ALA	479	41.033	74.108	16.033	1.00	89.85	BBBB	C
ATOH	4416	I	ALA	480	38.749	74.752	16.610	1.00	92.12	BBBB	I
ATOH	4418	CB	ALA	480	37.681	75.264	17.467	1.00	91.26	BBBB	C
ATOH	4419	CB	ALA	480	37.925	76.731	17.769	1.00	86.84	BBBB	C
ATOH	4420	C	ALA	480	36.306	75.030	16.849	1.00	91.39	BBBB	C

09555275-00998

45/58

ATOH	4421	O	ALA	480	35.413	74.647	17.610	1.00	91.70	8888	O
ATOH	4422	H	GLU	481	36.135	75.304	15.564	0.91	89.89	8888	H
ATOH	4424	CA	GLU	481	34.832	75.164	14.915	1.00	87.10	8888	C
ATOH	4425	CS	GLU	481	34.471	76.492	14.224	0.91	92.74	8888	C
ATOH	4426	CS	GLU	481	34.277	77.627	15.220	1.00	99.93	8888	C
ATOH	4427	CD	GLU	481	34.067	79.003	14.626	1.00	103.59	8888	C
ATOH	4428	OE1	GLU	481	35.011	79.777	14.381	1.00	103.27	8888	O
ATOH	4429	HE2	GLU	481	32.792	79.328	14.398	1.00	108.00	8888	H
ATOH	4432	C	GLU	481	34.755	73.947	14.005	1.00	85.31	8888	C
ATOH	4433	C	GLU	481	33.736	73.508	13.456	1.00	83.41	8888	O
ATOH	4434	H	LYS	482	35.849	73.188	13.908	1.00	82.85	8888	H
ATOH	4436	CA	LYS	482	35.982	71.990	13.089	1.00	73.49	8888	C
ATOH	4437	CB	LYS	482	37.377	71.930	12.480	1.00	73.13	8888	C
ATOH	4438	CS	LYS	482	38.287	73.128	12.494	1.00	76.33	8888	C
ATOH	4439	CD	LYS	482	39.413	72.968	11.471	1.00	80.62	8888	C
ATOH	4440	CE	LYS	482	39.985	74.310	11.027	0.91	76.66	8888	C
ATOH	4441	HE	LYS	482	41.252	74.136	10.262	0.01	76.20	8888	H
ATOH	4445	C	LYS	482	35.779	70.701	13.872	1.00	67.70	8888	C
ATOH	4446	O	LYS	482	35.879	70.744	15.092	1.00	69.99	8888	O
ATOH	4447	H	LEU	483	35.539	69.595	13.199	1.00	61.47	8888	H
ATOH	4449	CA	LEU	483	35.193	68.356	13.896	1.00	59.03	8888	C
ATOH	4450	CB	LEU	483	34.256	67.529	13.039	1.00	55.20	8888	C
ATOH	4451	CS	LEU	483	32.779	67.860	12.875	1.00	61.94	8888	C
ATOH	4452	CD1	LEU	483	32.406	69.154	13.595	1.00	44.78	8888	C
ATOH	4453	CD2	LEU	483	32.433	67.707	11.395	1.00	44.63	8888	C
ATOH	4454	C	LEU	483	36.421	67.509	14.229	1.00	59.73	8888	C
ATOH	4455	O	LEU	483	36.465	66.709	15.165	1.00	57.22	8888	O
ATOH	4456	H	ILE	484	37.345	67.543	13.262	1.00	56.21	8888	H
ATOH	4458	CA	ILE	484	38.597	66.822	12.367	1.00	52.58	8888	C
ATOH	4459	CB	ILE	484	38.480	65.390	12.870	1.00	50.27	8888	C
ATOH	4460	CS2	ILE	484	37.769	65.319	11.524	1.00	44.85	8888	C
ATOH	4461	CS1	ILE	484	39.870	64.766	12.756	1.00	39.78	8888	C
ATOH	4462	CD1	ILE	484	39.888	63.291	12.404	1.00	30.43	8888	C
ATOH	4463	C	ILE	484	39.623	67.645	12.608	1.00	53.49	8888	C
ATOH	4464	O	ILE	484	39.158	68.568	11.942	1.00	48.33	8888	O
ATOH	4465	H	SER	485	40.911	67.499	12.867	1.00	50.86	8888	H
ATOH	4467	CA	SER	485	41.898	68.335	12.209	1.00	49.78	8888	C
ATOH	4468	CB	SER	485	41.969	69.753	12.747	1.00	46.06	8888	C
ATOH	4469	CS	SER	485	43.190	70.035	13.376	1.00	63.03	8888	O
ATOH	4471	C	SER	485	43.294	67.711	12.240	1.00	50.57	8888	C
ATOH	4472	O	SER	485	43.510	66.601	12.740	1.00	46.55	8888	O
ATOH	4473	H	GLU	486	44.246	68.389	11.604	1.00	52.16	8888	H
ATOH	4475	CA	GLU	486	45.624	67.874	11.509	1.00	59.12	8888	C
ATOH	4476	CB	GLU	486	46.547	68.683	10.598	1.00	59.71	8888	C
ATOH	4477	CS	GLU	486	46.221	70.162	10.568	1.00	76.75	8888	C
ATOH	4478	CD	GLU	486	47.370	71.045	10.983	1.00	80.53	8888	C
ATOH	4479	OE1	GLU	486	46.315	70.404	11.472	1.00	91.67	8888	O
ATOH	4480	OE2	GLU	486	47.480	72.289	10.897	1.00	86.00	8888	O
ATOH	4481	C	GLU	486	46.272	67.773	12.896	1.00	56.50	8888	C
ATOH	4482	O	GLU	486	46.768	66.747	13.326	1.00	49.83	8888	O
ATOH	4483	H	GLU	487	45.955	68.738	13.732	1.00	59.37	8888	H
ATOH	4495	CA	GLU	487	46.129	68.736	15.169	1.00	59.36	8888	C
ATOH	4486	CB	GLU	487	45.303	69.887	15.729	1.00	61.32	8888	C
ATOH	4487	CS	GLU	487	45.645	70.232	17.159	1.00	79.21	8888	C
ATOH	4488	CD	GLU	487	46.367	71.545	17.177	1.00	86.09	8888	C
ATOH	4489	OE1	GLU	487	45.768	72.610	17.320	1.00	92.00	8888	O
ATOH	4490	OE2	GLU	487	47.637	71.452	17.026	1.00	96.51	8888	O
ATOH	4491	C	GLU	487	45.735	67.436	15.841	1.00	58.84	8888	C
ATOH	4492	O	GLU	487	46.421	67.018	16.761	1.00	61.93	8888	O
ATOH	4493	H	ASP	488	44.748	66.661	15.474	1.00	56.50	8888	H
ATOH	4495	CA	ASP	488	44.446	65.347	15.932	1.00	55.61	8888	C
ATOH	4496	CB	ASP	488	42.947	64.977	15.699	1.00	51.22	8888	C
ATOH	4497	CS	ASP	488	42.047	66.008	16.267	1.00	45.27	8888	C
ATOH	4498	CD1	ASP	488	42.114	66.563	17.387	1.00	56.45	8888	O
ATOH	4499	OD2	ASP	488	41.151	66.399	15.492	1.00	55.11	8888	O
ATOH	4500	C	ASP	488	45.206	64.211	15.238	1.00	58.91	8888	O
ATOH	4501	O	ASP	488	44.967	63.042	15.634	1.00	57.00	8888	O
ATOH	4502	H	LEU	489	45.933	64.513	14.163	1.00	57.39	8888	H
ATOH	4504	CA	LEU	489	46.659	63.426	13.528	1.00	64.03	8888	C
ATOH	4505	CB	LEU	489	46.722	63.677	12.024	1.00	62.69	8888	C
ATOH	4506	CS	LEU	489	45.746	62.788	11.226	1.00	53.71	8888	C
ATOH	4507	CD1	LEU	489	44.324	63.243	11.514	1.00	51.86	8888	C
ATOH	4508	CD2	LEU	489	46.072	62.967	9.766	1.00	55.20	8888	C
ATOH	4509	C	LEU	489	48.017	63.355	14.210	1.00	68.12	8888	C
ATOH	4510	O	LEU	489	48.860	62.560	13.836	1.00	71.57	8888	O
ATOH	4511	H	ASN	490	48.306	64.318	15.063	1.00	68.24	8888	H
ATOH	4513	CA	ASN	490	49.497	64.424	15.855	1.00	75.04	8888	C
ATOH	4514	CB	ASN	490	49.734	65.910	16.187	1.00	84.46	8888	C
ATOH	4515	CS	ASN	490	51.191	66.105	16.589	1.00	98.83	8888	C
ATOH	4516	OD1	ASN	490	52.092	65.342	16.178	1.00	97.25	8888	O
ATOH	4517	HD2	ASN	490	51.459	67.128	17.407	1.00	100.47	8888	H
ATOH	4520	C	ASN	490	49.350	63.610	17.130	1.00	80.30	8888	C
ATOH	4521	O	ASN	490	49.891	62.484	17.264	1.00	80.97	8888	O
ATOH	4521	OT	ASN	490	48.510	64.012	19.091	1.00	89.51	8888	O
ATOH	4779	S	SUL	493	37.234	-7.808	65.465	1.00	108.87	8888	S

TABLE 22555555

46/58

ATOH	4771	01	SUL	493	39.452	-7.821	65.315	1.00110.65	DDDD	0
ATOH	4772	02	SUL	493	37.611	-7.873	64.020	1.00110.21	DDDD	0
ATOH	4773	03	SUL	493	36.533	-6.555	65.856	1.00109.93	DDDD	0
ATOH	4774	04	SUL	493	36.333	-8.978	65.639	1.00107.58	DDDD	0
ATOH	4775	S	SUL	494	56.567	19.753	66.302	1.00109.91	DDDD	S
ATOH	4776	01	SUL	494	56.597	19.128	67.659	1.00107.98	DDDD	0
ATOH	4777	02	SUL	494	57.964	20.027	65.795	1.00112.59	DDDD	0
ATOH	4778	03	SUL	494	55.749	21.006	66.267	1.00111.35	DDDD	0
ATOH	4779	04	SUL	494	55.886	18.792	65.379	1.00109.86	DDDD	0
ATOH	4780	S	SUL	495	34.533	11.240	75.722	1.00114.67	DDDD	S
ATOH	4781	01	SUL	495	35.074	12.213	76.595	1.00111.38	DDDD	0
ATOH	4782	02	SUL	495	35.476	10.329	74.974	1.00113.60	DDDD	0
ATOH	4783	03	SUL	495	33.552	11.850	74.748	1.00112.77	DDDD	0
ATOH	4784	04	SUL	495	33.773	10.279	76.604	1.00113.18	DDDD	0
ATOH	4785	S	SUL	496	35.466	24.844	59.093	1.0050.73	DDDD	S
ATOH	4786	01	SUL	496	35.613	24.843	60.607	1.0062.59	DDDD	0
ATOH	4787	02	SUL	496	36.002	23.581	59.571	1.0048.59	DDDD	0
ATOH	4788	03	SUL	496	35.880	26.084	58.455	1.0056.74	DDDD	0
ATOH	4789	04	SUL	496	33.958	21.953	59.034	1.0059.34	DDDD	0
ATOH	4790	S	SUL	497	47.653	-2.303	70.199	1.0068.98	DDDD	S
ATOH	4791	01	SUL	497	47.849	-1.058	70.996	1.0068.52	DDDD	0
ATOH	4792	02	SUL	497	48.594	-2.509	69.072	1.0070.94	DDDD	0
ATOH	4793	03	SUL	497	46.187	-2.393	69.810	1.0073.47	DDDD	0
ATOH	4794	04	SUL	497	47.799	-3.446	71.129	1.0071.33	DDDD	0
ATOH	4795	S	SUL	498	56.527	35.758	75.513	1.0071.48	DDDD	S
ATOH	4796	01	SUL	498	55.870	35.013	76.621	1.0072.97	DDDD	0
ATOH	4797	02	SUL	498	57.759	34.996	75.167	1.0069.11	DDDD	0
ATOH	4798	03	SUL	498	56.619	37.237	75.785	1.0072.45	DDDD	0
ATOH	4799	04	SUL	498	55.623	35.809	74.330	1.0072.74	DDDD	0
ATOH	4800	S	SUL	499	40.639	27.365	69.499	1.0074.04	DDDD	S
ATOH	4801	01	SUL	499	40.218	26.039	70.045	1.0076.90	DDDD	0
ATOH	4802	02	SUL	499	42.089	27.608	69.835	1.0075.15	DDDD	0
ATOH	4803	03	SUL	499	39.823	28.467	70.098	1.0077.27	DDDD	0
ATOH	4804	04	SUL	499	40.424	27.245	68.018	1.0075.70	DDDD	0
ATOH	4805	S	SUL	500	44.996	53.228	20.568	1.0083.89	DDDD	S
ATOH	4806	01	SUL	500	45.080	54.400	21.461	1.0084.79	DDDD	0
ATOH	4807	02	SUL	500	46.109	52.266	20.827	1.0090.38	DDDD	0
ATOH	4808	03	SUL	500	45.032	53.674	19.135	1.0092.23	DDDD	0
ATOH	4809	04	SUL	500	43.762	52.396	20.723	1.0091.61	DDDD	0
ATOH	4810	OW	WAT	501	29.970	6.904	77.713	1.0034.84	DDDD	0
ATOH	4813	OW	WAT	502	42.522	18.998	78.232	1.0055.27	DDDD	0
ATOH	4816	OW	WAT	503	37.561	21.003	67.518	1.0041.63	DDDD	0
ATOH	4819	OW	WAT	504	50.446	5.721	63.485	1.0057.37	DDDD	0
ATOH	4822	OW	WAT	505	56.668	24.854	72.729	1.0057.34	DDDD	0
ATOH	4825	OW	WAT	506	50.605	57.695	22.727	1.0054.26	DDDD	0
ATOH	4828	OW	WAT	507	55.123	37.781	61.204	1.0043.71	DDDD	0
ATOH	4831	OW	WAT	508	17.414	-9.070	74.793	1.0048.79	DDDD	0
ATOH	4834	OW	WAT	509	44.263	20.885	63.811	1.0028.64	DDDD	0
ATOH	4837	OW	WAT	510	45.095	19.708	84.433	1.0049.09	DDDD	0
ATOH	4840	OW	WAT	511	33.537	1.927	71.115	1.0060.39	DDDD	0
ATOH	4843	OW	WAT	512	19.279	4.902	75.254	1.0055.23	DDDD	0
ATOH	4846	OW	WAT	513	11.502	-0.835	68.996	1.0057.51	DDDD	0
ATOH	4849	OW	WAT	514	24.591	17.207	56.665	1.0056.36	DDDD	0
ATOH	4852	OW	WAT	515	56.947	34.914	62.552	1.0036.47	DDDD	0
ATOH	4855	OW	WAT	516	58.092	39.983	66.234	1.0030.34	DDDD	0
ATOH	4858	OW	WAT	517	48.308	40.726	56.768	1.0081.69	DDDD	0
ATOH	4861	OW	WAT	518	25.776	2.355	85.630	1.0066.34	DDDD	0
ATOH	4864	OW	WAT	519	30.644	68.108	30.765	1.0082.28	DDDD	0
ATOH	4867	OW	WAT	520	38.739	54.257	43.611	1.0043.41	DDDD	0
ATOH	4870	OW	WAT	521	22.896	4.470	64.871	1.0048.71	DDDD	0
ATOH	4873	OW	WAT	522	30.939	50.249	19.364	1.0054.00	DDDD	0
ATOH	4876	OW	WAT	523	32.413	9.061	42.441	1.0044.45	DDDD	0
ATOH	4879	OW	WAT	524	41.019	42.560	55.653	1.0043.40	DDDD	0
ATOH	4882	OW	WAT	525	54.268	51.393	37.513	1.0055.10	DDDD	0
ATOH	4885	OW	WAT	526	37.130	13.599	81.397	1.0046.49	DDDD	0
ATOH	4888	OW	WAT	527	42.585	10.244	94.472	1.0035.95	DDDD	0
ATOH	4891	OW	WAT	528	43.661	61.633	18.450	1.0041.05	DDDD	0
ATOH	4894	OW	WAT	529	27.980	19.862	53.348	1.0054.59	DDDD	0
ATOH	4897	OW	WAT	530	59.527	38.520	64.116	1.0037.96	DDDD	0
ATOH	4900	OW	WAT	531	22.451	1.046	57.437	1.0059.31	DDDD	0
ATOH	4903	OW	WAT	532	30.360	16.123	70.205	1.0040.39	DDDD	0
ATOH	4906	OW	WAT	533	46.835	27.888	65.854	1.0052.34	DDDD	0
ATOH	4909	OW	WAT	534	39.446	49.001	45.379	1.0046.05	DDDD	0
ATOH	4912	OW	WAT	535	46.992	51.272	50.722	1.0052.62	DDDD	0
ATOH	4915	OW	WAT	536	44.263	10.776	73.017	1.0040.61	DDDD	0
ATOH	4918	OW	WAT	537	33.670	58.861	20.848	1.0051.56	DDDD	0
ATOH	4921	OW	WAT	538	52.469	21.639	73.804	1.0061.98	DDDD	0
ATOH	4924	OW	WAT	539	49.985	44.871	37.324	1.0045.45	DDDD	0
ATOH	4927	OW	WAT	540	24.074	-1.791	60.077	1.0040.40	DDDD	0
ATOH	4930	OW	WAT	541	35.267	0.714	79.039	1.0051.34	DDDD	0
ATOH	4933	OW	WAT	542	31.251	-1.176	62.362	1.0048.33	DDDD	0
ATOH	4936	OW	WAT	543	41.728	-5.156	55.290	1.0060.67	DDDD	0
ATOH	4939	OW	WAT	544	48.564	37.335	72.612	1.0071.69	DDDD	0
ATOH	4942	OW	WAT	545	49.501	40.030	67.582	1.0044.84	DDDD	0
ATOH	4945	OW	WAT	546	54.851	7.987	60.018	1.0049.91	DDDD	0

PCT/98/00998



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WO 99/28347

PCT/AU98/00998

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48/58

Face 3

Cleft 2

Face 2

Cleft 1

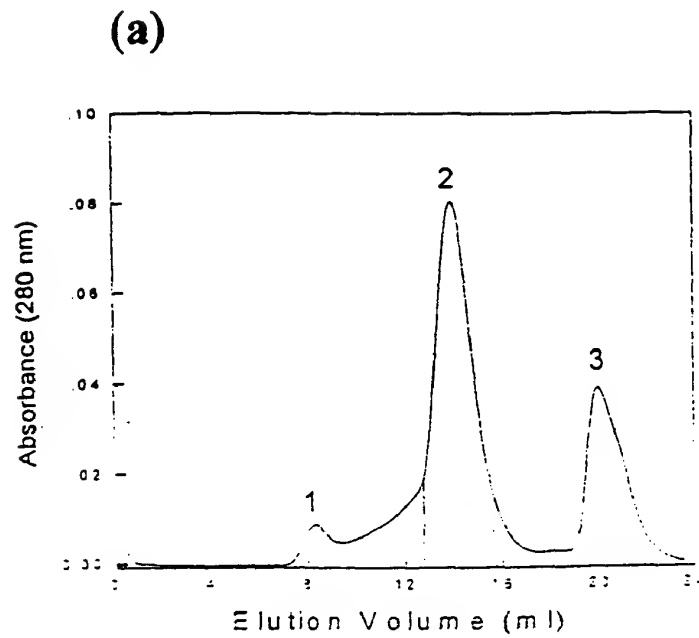
Face 1

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(35S) 33L 32L 30H 28Y (27G) 26E 255I 259E 261S 262D 305E 309K (316S) 313S 336R  
(61A) 59R 58F 56L 54Y 53E 242E 241F (274M) 266F 275Q 276E 282I 300K (302C) 319M 318Q 314V (344V) 338N  
91E 90F (88V) 83Y 80K 79W 272E 279S (280G) 346Q 343E  
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(140V) 138Y

Figure 2



49/58



(b)

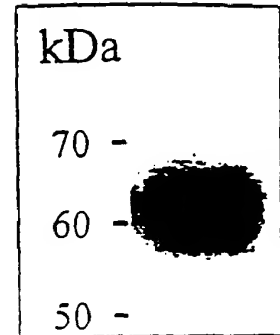
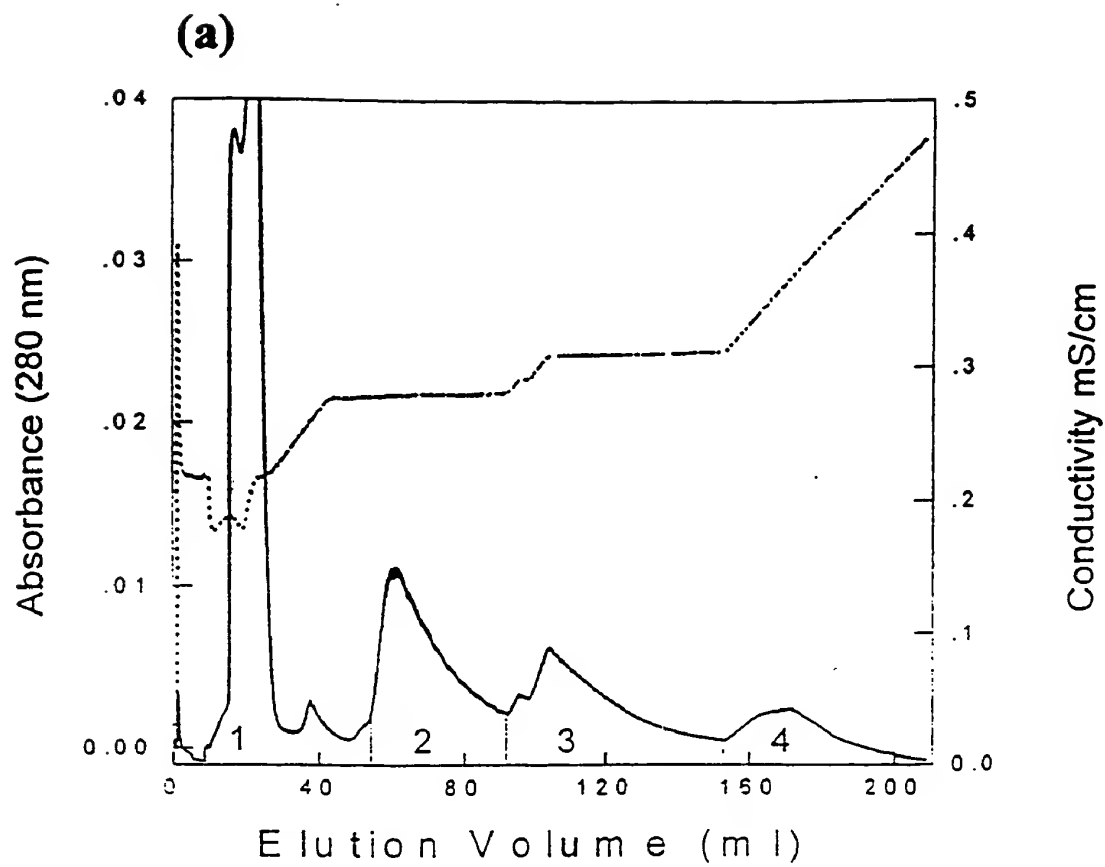
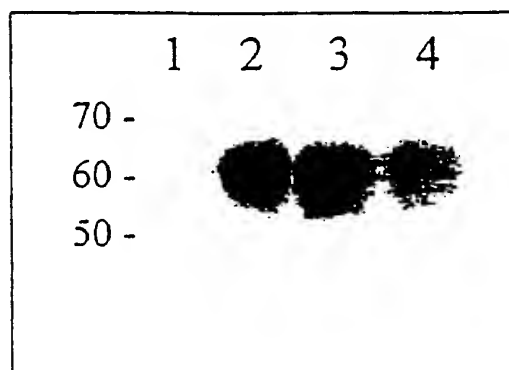


Figure 3

50/58



(b)



(c)

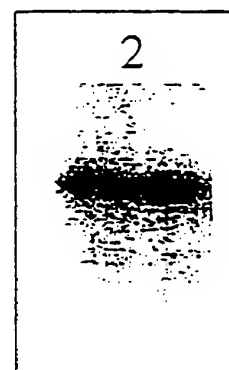


Figure 4

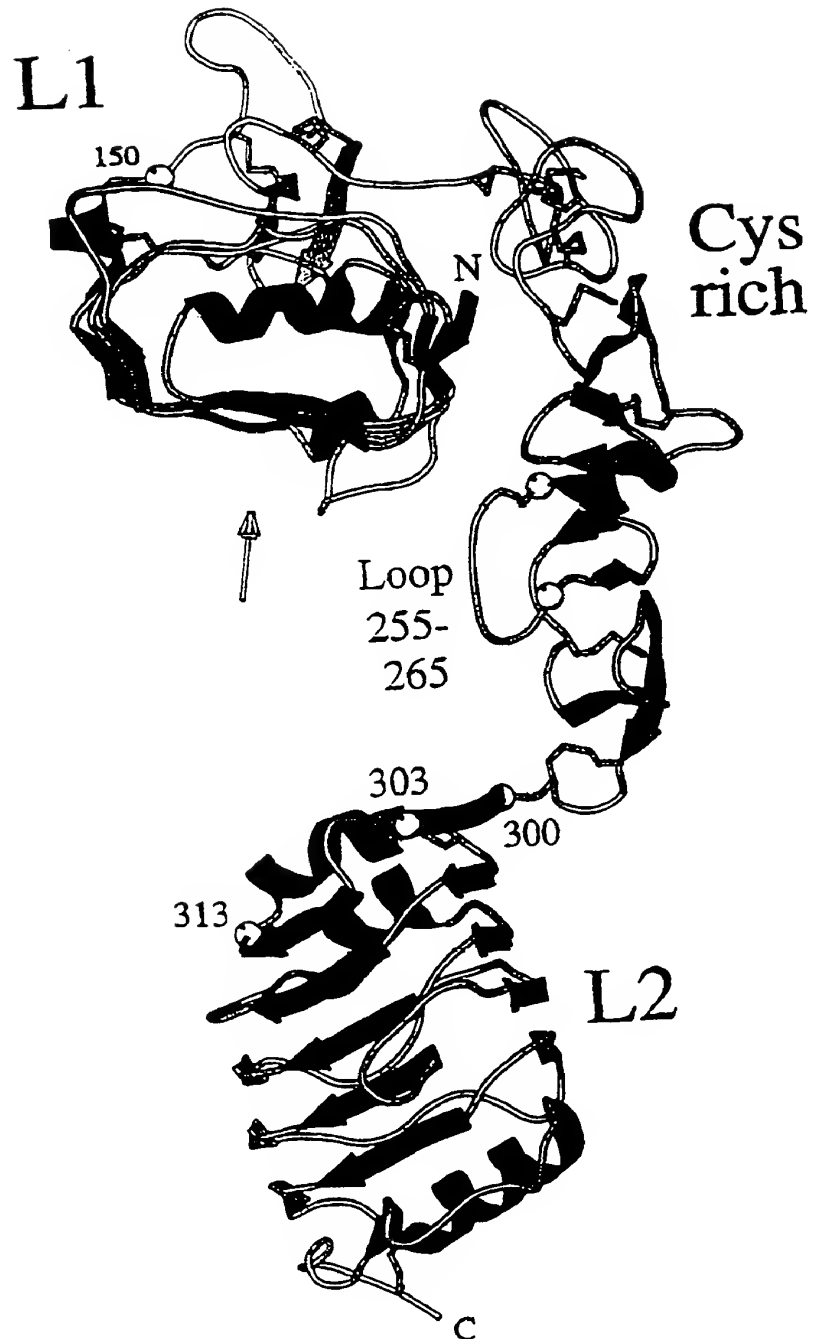
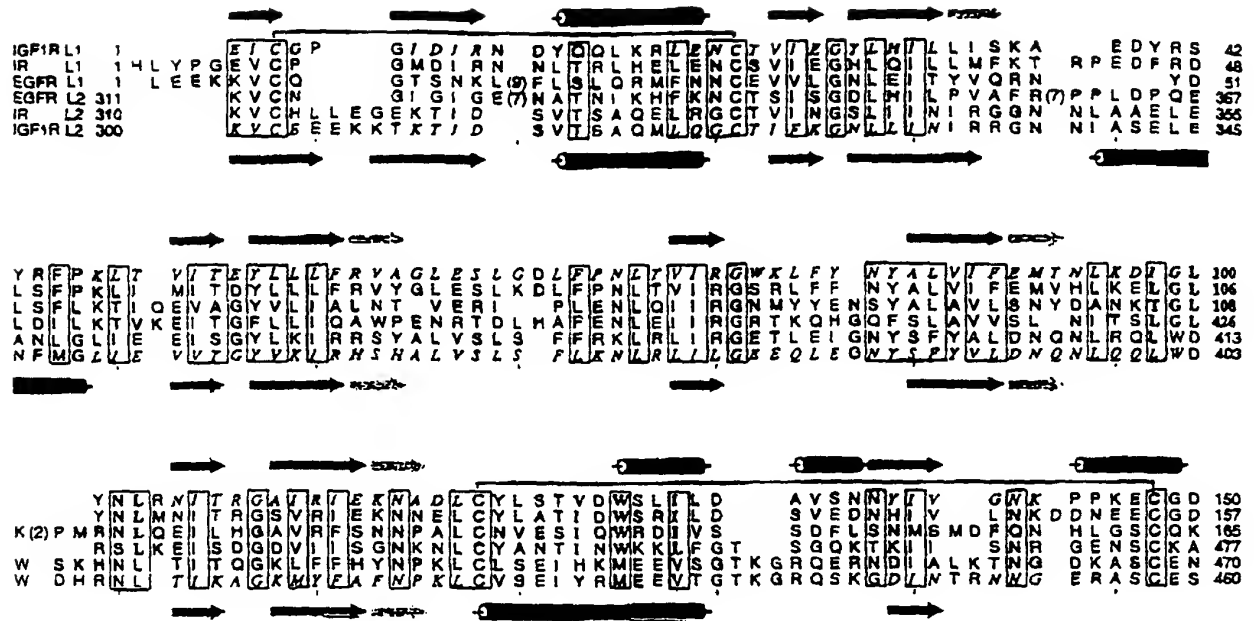


Figure 5

52/58

a



b

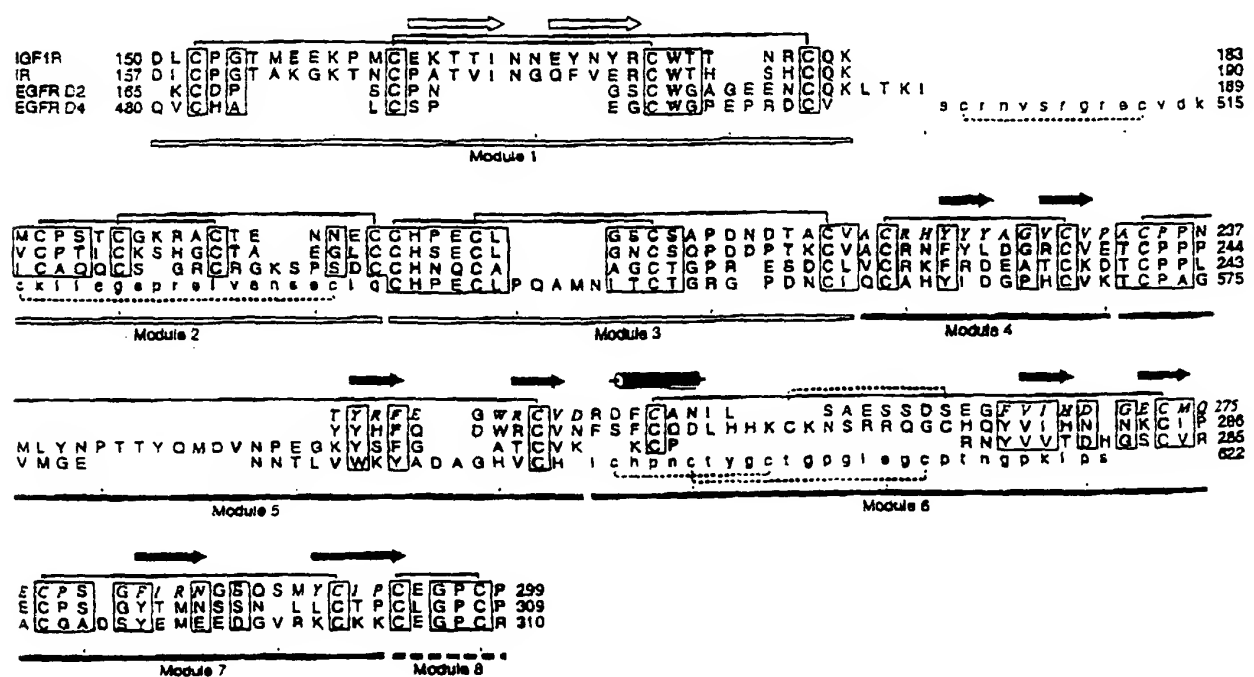


Figure 6

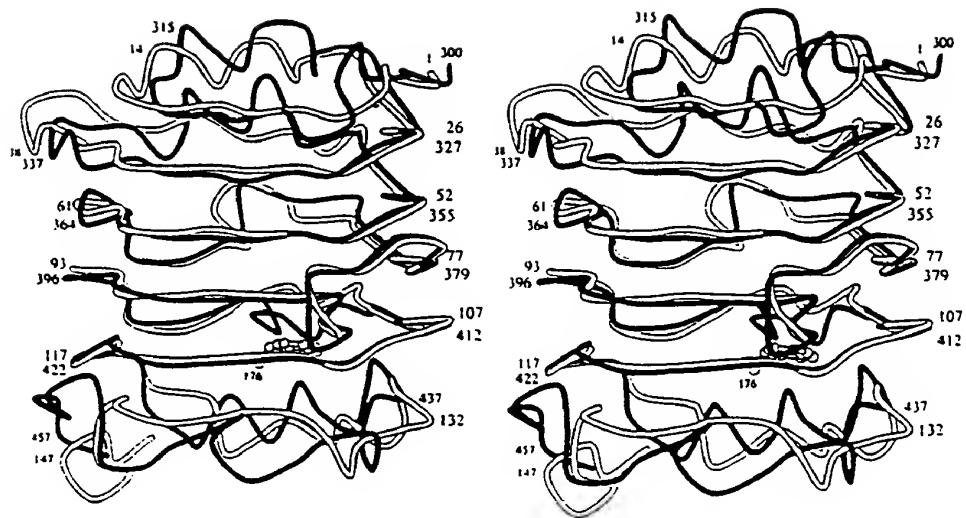


Figure 7

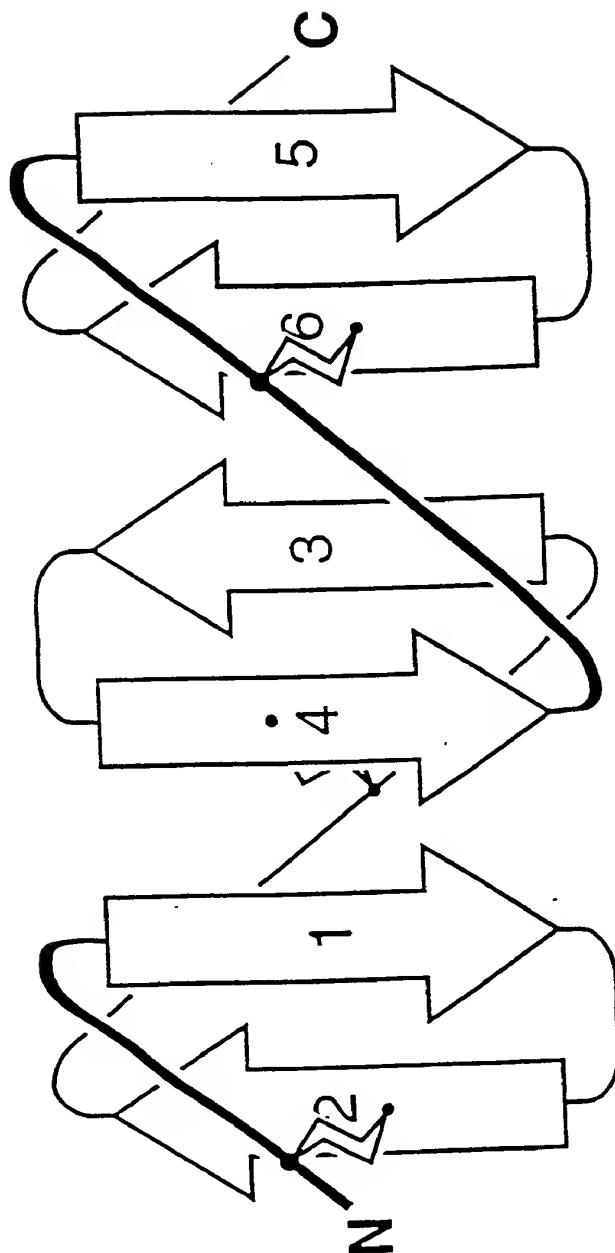


Figure 8

55/58

Figure 9: Sequence Alignment of hIGF-1R, hIR and hIRR ectodomains.

Derived by use of the PileUp program in the software package of the  
Genetics Computer Group, 575 Science Drive, Madison, Wisconsin, USA.

Symbol Comparison table: GenRunData:PileUpPep.Cmp CompChek: 1254

GapWeight: 3.0  
GapLengthWeight: 0.1

Name: Higflr	Len: 972	CheCk: 1781	Weight: 1.00
Name: Hir	Len: 972	CheCk: 2986	Weight: 1.00
Name: Hirr	Len: 972	CheCk: 9819	Weight: 1.00

```

      *
Higflr  ....EICGP GIDIRNDYQQ LKRLNCTVI EGYLHILLIS K..AEDYSY 43
Hir     HLYPGEVC.P GMDIRNNLTR LHELENCVI EGHQILLMF KTRPEDFRDL 49
Hirr    ....MNVC.P SLDIRSEVAE LRQLENCVV EGHQILLMF TATGEDFRGL 45

      *
Higflr  RFPKLTVITE YLLFRVAGL ESLGDLFPNL TVIRGWKLFY NYALVIFEMT 93
Hir     SFPKLIMITD YLLFRVYGL ESLKDLFPNL TVIRGSRLFF NYALVIFEMV 99
Hirr    SFPRLTQVTD YLLFRVYGL ESLRDLFPNL AVIRGTRLFL GYALVIFEMP 95

      *
Higflr  NLKDIGLYNL RNITRGAIRI EKNADLCYLS TVDWSLILDA VSNYYIVGNK 143
Hir     HLKELGLYNL MNITRGSVRI EKNNELCYLA TIDWSRILDS VEDNYIVLNK 149
Hirr    HLRDVALPAL GAVLRGAVRV EKNQELCHLS TIDWGLLQPA PGANHIVGNK 145

      *
Higflr  PPK.ECGDLC PGTMEEEKPM. CEKTTINNEY NYRCWTTNRC QKMCPPSTCGK 191
Hir     DDNEECGDIC PGTAKGKTN. CPATVINGQF VERCWTHSHC QKVCPTICKS 198
Hirr    LG.EECADVC PGVLGAAGEP CAKTTFSGHT DYRCWTSSHC QRVCPCPHG. 193

      *
Higflr  RACTENNECC HPECLGSCSA PDNDTACVAC RHYYYAGVCV PACPPNTYRF 241
Hir     HGCTAEGLCC HSECLGNCSQ PDDPTKCVAC RNFYLDGRGV ETCPPPYHYF 248
Hirr    MACTARGECC HTECLGGCSQ PEDPRACVAC RHLYFQGAQL WACPPGTYYQY 243

      *
Higflr  EGWRCVDRDF CANILSAES. ...SDSEGFV IHDGECMQEC PSGFIRNGSQ 287
Hir     QDWRCVNESF CQDLHHKCKN SRRQGCHQYV IHNKCTIPEC PSGYTMNSSN 298
Hirr    ESWRCVTAER CASLHSVPG. ....RASTFG IHQGSCLAQC PSGFTRNSS. 287

      *
Higflr  SMYCIPCEGP CPKVCCEEKK TKTIDSVTSA QMLQGCTIFK GNLLINIRRG 337
Hir     .LLCTPCLGP CPKVCHLLEG EKTIDSVTSA QELRGCTVIN GSLIINIRGG 347
Hirr    SIFCHKCEGL CPKECKV..G TKTIDSIQAA QDLVGCTHVE GSLILNLRQG 335

      *
Higflr  NNIAELENEF MGLIEVVTGY VKIRSHALV SLSFLKNLRL ILGEEQLEGN 387
Hir     NNLAEELEAN LGLIEEISGY LKIRSYALV SLFFRKLRL IRGETLEIGN 397
Hirr    YNLEPQLQHS LGLVETITGF LKIKHSFALV SLGFFKNLKL IRGDAMVDGN 385

      *
Higflr  YSFYVLDNQN LQQLWDWDHR NLTIKAGKMY FAFNPKLCVS EIYRMEEVTG 437
Hir     YSFYALDNQN LRQLWDWSKH NLTITQGKLF FHYNPKLCLS EIHQMEEVSG 447
Hirr    YTLVYLDNQN LQQLGSWVAA GLTIPVGKIY FAFNPRLCLE HIYRLEEVTG 435

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56/58

\* !End of 1-462 fragment

Higflr TKGRQSKGDI NTRNNGERAS CESDV LHFTS TTTSKNRIII TWHRYRPPDY 487  
 Hir TKGRQERNDI ALKTNGDQAS CENEL LKFSY IRTSFDKILL RWEPLYWPPDF 497  
 Hirr TRGRQNKAEI NPRTNGDRAA CQTRT LRFVS NVTEADRILL RWERYEPLA 485

Higflr RDLISFTVYY KEAPFKNVTE YDGDQACGSN SWNMVDVDLP .....PNKDV 532  
 Hir RDLGFMIFY KEAPYQNVTE FDGDQACGSN SWTVVDIDPP LRSNDPKSQN 547  
 Hirr RDLLSFIVYY KESPFQDATE HVGPDACGTQ SWNLLDVLP L.....SRTQ 530

Higflr EPGILLHGLK PWTQYAVYVK AVTLTMVEND HIRGAKSEIL YIRTNASVPS 582  
 Hir HPGWLMRGLK PWTQYAIIVK TL.VTFSDER RTYGAKSDII YVQTDATNPS 596  
 Hirr EPGVTLASLK PWTQYAVFVR AITLTTEEDS PHQGAQSPIV YLRTLPAAPT 580

Higflr IPLDVLSASN SSSQLIVKWN PPSLPNGNLS YYIVRWQRQP QDGYLYRHNY 632  
 Hir VPLDPISVSN SSSQIILKWK PPSDPNGNIT HYLFWERQA EDSELFELDY 646  
 Hirr VPQDVISTSN SSSHLLVRWK PPTQRNGNLT YYLVWQRLA EDGDLYLNDY 630

\* \* \* \* \*  
 Higflr CSKD.KIPIR KYADGTIDIE EVTENPKTEV CGGEKGPCCA C...PKTEAE 678  
 Hir CLKGLKLPSR TWS.PPFESE DSQKHNOSE. YEDSAGECCS C...PKTDSQ 691  
 Hirr CHRGLRLPTS N.NDPRFDGE DGDPEAEME. ....SDCCP CQHPPPGQVL 673

α----->-----β  
 Higflr KQAEKEEAAY RKVFENFLHN SIFVPRPERK RRDVMQVANT TMSSRSRNTT 728  
 Hir ILKELEESSF RKT FEDYLHN VVFVPRPSRK RRS LGDVGNV TVAVP...TV 738  
 Hirr PPLEAQEASF QKKFENFLHN AITIPISPWK VTSINKSPQR D.SGRHRAA 722

\*  
 Higflr AA..DTYMIT DPEELETEYP FFESRVDNKE RTVISNLRPF TLYRIDIHSC 776  
 Hir AAFPNTSSTS VPTSPEEHRP F..EKVVNKE SLVISGLRHF TGYRIELQAC 786  
 Hirr GPLRLGGNSS DFEIQEDKVP .....RE RAVLSGLRHF TEYRIDIHAC 764

\*  
 Higflr NHEAEKLGCS ASNFVFARTM PAEGADDIPG PVTWEPRPEN SIFLKWPEPE 826  
 Hir NQDTPEERCS VAAYVSARTM PEAKADDIVG PVTHEIFENN VVHLMWQEPK 836  
 Hirr NHAHTVGCS AATFVFARTM PHREADGIPG KVAWEASSKN SVLLRWLEPP 814

\*  
 Higflr NPNGLILMYE IKYGS.QVED QRECVSRQEY RKYGGAKLNR LNPGNYTARI 875  
 Hir EPNGLIVLYE VSYRRYGDEE LHLCVSRKHF ALERGCRLRG LSPGNYSVRI 886  
 Hirr DPNGLILKYE IKYRRLGEEA TVLCVSRRLRY AKFGGVHLAL LPPGNY SARV 864

Higflr QATSLSGNGS WTDVPFFYVQ AKTGYENFIH L 906  
 Hir RATSLAGNGS WTEPTYFYVT DYLDVPSNIA K 917  
 Hirr RATSLAGNGS WTDVAFYIL GPPEEDAGGL H 895

FOOEBO: 9225550



57/58

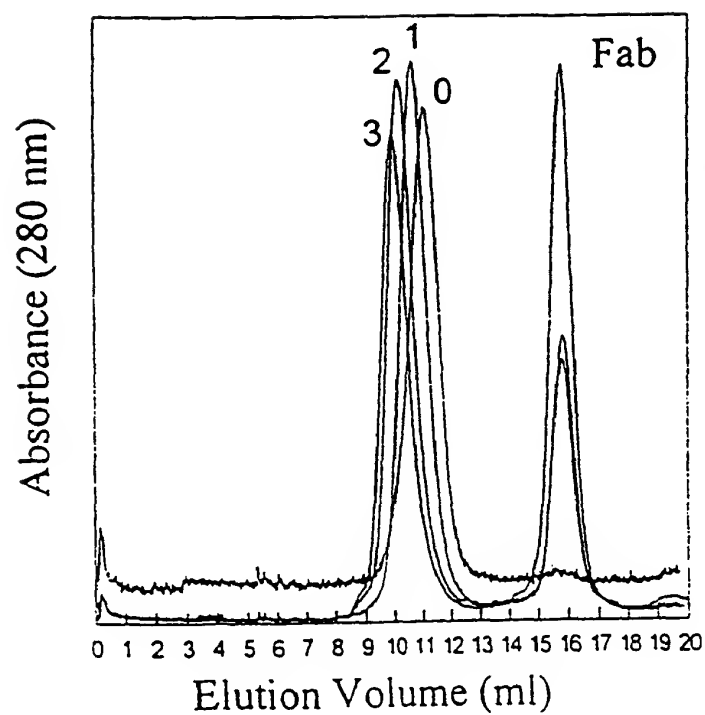


Figure 10











Schematic interpretations of EM images			
Sample	Projection along:		
	y axis	z axis	x axis
hIR			
hIR/ 83-7			
hIR/ 83-14			
hIR/ 18-44/83-14			
hIR/ 83-7/18-44			
hIR/ 83-7/83-14			

Figure 11